Virginia Department of Environmental Quality
Response to Public Comments Received Regarding the Draft 2008 305(b)/303(d) Water Quality Integrated Report

September 2008

HAMPTON ROADS SANITATION DISTRICT (HRSD)

RE: Comments on 2008 Water Quality Assessment and Impaired Waters Integrated Report – DRAFT

The Hampton Roads Sanitation District is pleased to offer our comments on the referenced document. The report represents a tremendous effort on the part of the VDEQ, in monitoring, data analysis and report compilation. HRSD appreciates this effort and welcomes the improvements in the report, most notably in the streamlined Appendix A listings. With each report cycle comes noticeable improvements. HRSD would like to offer the following to continue to improve the report's value in identifying waters in need of focused resources to achieve restoration of designated uses.

1- Freshwater Bacterial Impairments: Bacteria continue to be the leading cause of impairment in freshwater rivers. As a result, a tremendous amount of resources will be spent developing and implementing TMDLs for these waters. Such a finding emphasizes the need to have criteria that are as accurate and technically defensible as science allows. The suitability of the freshwater criteria is currently being debated through the Triennial Review process. HRSD urges DEQ to support the revision of the criterion to allow for the equally protective 1% risk level for gastrointestinal illness. To efficiently manage resources, protection and restoration efforts must be directed at waters that have the greatest need for improvement. A criterion associated with a 1.0% illness rate protects the designated use of these water bodies and allows the Commonwealth to redirect funding to solve problems that have a greater human health impact. EPA clearly indicates that a state may implement a criterion associated with a risk level of 1.0% in freshwater. Such a change is technically supported by the regulations and will adequately protect public health and recreational opportunities. This will subsequently reduce the number of TMDLs required, allowing DEQ to focus its limited resources on restoring waters which will provide the greatest benefits to human and ecological health. At a minimum, this change will have the added benefit of making some bacterial TMDLs attainable without requiring unrealistic reductions in natural wildlife sources.

2- Unpromulgated Methods/Benchmarks: DEQ continues to use unpromulgated methods or benchmarks to make determinations of impairment, including but not limited to B_IBI scores, sediment thresholds, bioaccumulation factors used in calculating fish tissue criteria, and analytical methods. HRSD understands that the report is not regulatory in nature and doesn't deny the merit in using these methods to identify waters in need of additional monitoring. However, the TMDL process is regulatory and some of the unpromulgated methods are retained in TMDL development (i.e. PCB analysis). DEQ must allow stakeholders and the public the opportunity to provide input into the development of these benchmarks and methods. This same concept applies to citizen monitoring methodologies as well. The regulated community must be allowed to review both the new methods and the results of any studies comparing the new methods to DEQ or EPA approved methods. If the public and stakeholders are involved from the beginning and have confidence in the benchmarks and methods used, then any TMDLs that result from findings of impairment based on these benchmarks will likely have greater support.

3 - Statistical Determination of Attainment: HRSD strongly supports the proposal to incorporate statistical measures of uncertainty into the reference curve attainment process in future assessments. These measures are an absolute necessity. Without these statistical measures of uncertainty, waters could be inaccurately assessed as impaired, resulting in an inefficient expenditure of resources for TMDL development.

HRSD would be pleased to meet with the DEQ to further discuss the issues and determine ways in which we can work together to resolve these issues and improve the upcoming assessments.

Sincerely,

Jamie S. Heisig-Mitchell
Environmental Scientist
Hampton Roads Sanitation District

RESPONSE: -1

This issue is currently (2008) being considered in the Triennial Review of Water Quality Standards and is not an assessment issue.

RESPONSE: - 2

Department of Environmental Quality (DEQ) is committed to assessing all valid water quality assessment information. Water quality assessment guidance and associated assessment methodologies are provided for public information and comment as required by the Water Quality Monitoring Information and Restoration Act.

RESPONSE: - 3

The Department of Environmental Quality (DEQ) is always looking for ways to improve the water quality assessment procedures and techniques relative to sound science and statistical certainty. While DEQ agrees that future assessments should consider factoring in statistical error where appropriate, there are important implications associated with this issue that need to be discussed by the EPA-CBO and other Bay Partners before proceeding. DEQ will forward HRSD's comment to the EPA-CBO and then work with all interested parties, including HRSD, to draw up a plan for addressing this matter.

BLUESTONE CONSERVATORY

I am writing you on behalf of the Bluestone Conservatory after speaking with the President, Mr. Andrew Satmary and Board Members.

Major improvements must be made for the health and safety of potable water recipients from the upper Bluestone River.

Raw human sewage is but one of the major problems neglected over the years. Housing exploded decades ago with septic tanks, when Bluefield, VA incorporated Fincastle Estates and other housing developments were allowed to keep the septic tanks which fail over time. Numerous housing developments in the upper Bluestone River have inadequate sewage disposal or failed sewage systems as well as business enterprises and trailer parks.

Mandatory hook up to sewage lines is asked to aleviate the river's health concerns as well as those who must use this as their potable water source.

Toxins; IE: PCBS, toluene, tetrachlorethylene and various other incursions have been allowed to damage the waters of the upper Bluestone River. Mandatory application of the standing laws would protect the headwaters of the Bluestone River if applied. These regulations must in the future be applied to protect the health of citizens.

Land owners who disregard the river's health and dump fill into the river, wetlands and marshes must be stopped. Only the authority from County and Town officials will make the river safe.

We ask your assistance to bring about a safer river for all.

Sincerely,

W. Roger Angles
716 Tazewell Avenue
Bluefield, VA 24605 Ph: 276-322-3221
Corresponding Secretary
Bluestone Conservatory

RESPONSE:

As you mention, housing development can add additional strain on all natural resources. State laws and local ordinances are enacted to protect these natural resources from adverse effects of anthropogenic activities including housing and commercial development. Department of Environmental Quality (DEQ) is committed to protecting the environment and the natural resources of Virginia.

Re: Comments on draft 2008 305(b) / 303(d) Water Quality Report

Dear Mr. Glover:

I would like to congratulate DEQ staff on the 2008 draft report. Obviously it took a significant amount of effort to produce the document. My comments relate primarily to the addition of 3.14 river miles to the existing Roanoke River benthic impairment listing. This is designated as cause code L04r-01-BEN in the draft report.

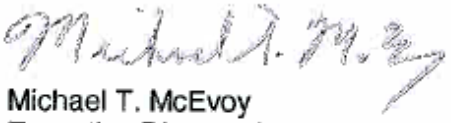
The report discusses two VSCI surveys conducted in 2005 and 2006 at station 4AROA198.08 (Explore Park). The associated text suggests that nutrients are responsible for the impairment because algae were observed near the sample site. This conclusion was reached without nutrient sampling or comparative analyses of the algae. There are a number of reasons algae could be present. For example, the sample site is downstream of a dam which may eliminate high and low flow regime events that would otherwise scour or expose to air the river's rocks. It is quite possible that algae is only present at the sample site and not is significant throughout the river segment.

The comments about algae and nutrients are speculation only and should not be included in the text of the report as they are unsupported by facts. The statements are also in direct contradiction of the benthic impairment TMDL report prepared for the Roanoke River which states that sediment is the primary cause of impairment. In fact, nutrients were specifically ruled out as a factor of benthic impairment. I am requesting that these statements be removed from the draft report as they are speculative, contradictory and might bias future benthic investigations and corrective actions.

Finally, minor correction is needed for the paragraph describing sampling at station 4AROA202.20. The report refers to the sampling point as the 14th Street Bridge. I believe it is actually the 13th Street Bridge.

My name and mailing information are listed below. My email address is mike.mcevoy@westernvawater.org. Please do not hesitate to contact me if you have any questions.

Sincerely,



Michael T. McEvoy
Executive Director, Wastewater Services

cc: file, TMDL RR

Our Mission is Clear
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RESPONSE:

Thank you for your comments on the Draft 2008 Water Quality Assessment 305(b)/303(d) Integrated Report. Department of Environmental Quality (DEQ) Staff acknowledges that the upstream TMDL Study identifies nutrients as a non-stressor for that portion of the Roanoke River. Your request to remove narrative supporting documentation are noted but the narrative shall remain as explained below.

This section of the Roanoke River, downstream of Niagara Dam to the mouth of Back Creek, was not investigated during the development of the Roanoke River Benthic TMDL. The TMDL Study did note however that "Total Nitrogen and phosphorus concentrations do increase fairly significantly below the Western Virginia Water Authority (Table 3-10), but still remain relatively low below the outfall [Benthic TMDL Development for the Roanoke River, Virginia, March 2006, page 4-3]. Benthic macroinvertebrate communities surveyed in 2005 and 2006 suggest the presence of organic matter, e.g. nutrients. Habitat observations of algae on the substrate also indicate the presence of organic matter. The narrative comments in the integrated report are intended to alert TMDL investigators to the potential presence of nutrients as a Cause. The TMDL Study will determine the benthic primary stressor be it sediment, nutrients or other as yet un-identified stressor in this portion of the Roanoke. Correction of the station description is noted and will be made.

Should you have any additional questions please feel free to call and again thank you for your comments.

Southern Environmental Law Center

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July 25, 2008

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VIA EMAIL: dmglover@deq.virginia.gov
RE: Comments on Virginia's 2008 Draft 303(d) List

Dear Mr. Glover,

Please accept these comments of the Southern Environmental Law Center on Virginia's Draft 2008 303(d) list.

We request that DEQ include the entire Virginia mainstems of both the Clinch and Powell Rivers and the Clinch River tributaries Copper Creek and Indian Creek as impaired waters under Category 5 based on evidence of losses in native mussel species in both of these rivers. Scientific evidence of declines, in many cases to the point of extirpation, in native mussel species shows that these rivers are unable to fully support their existing uses[1] and are therefore impaired.

I. Mussel Decline in the Clinch and Powell Rivers

The importance of the mussel species of the Clinch and Powell Rivers is widely known. These two rivers support "more of Virginia's imperiled mussel species than any other basin in Virginia and most places in North America."[2] They also have "the greatest number of federally listed endangered species (18) and also one of the largest concentrations of endemic species (19) in the United States."[3] However, as the following summary of published research indicates, numerous species of mussels that were found in the Clinch and Powell Rivers in 1975 have since disappeared.

The Clinch River has been recognized as particularly important. According to The Nature Conservancy, it has the "highest number of globally imperiled and vulnerable

[1] "Existing uses are those uses actually attained in the water body on or after November 28, 1975, whether or not they are included in the water quality standards." 40 C.F.R. §131.3(e).
[2] EPA, *Clinch and Powell Watershed: Ecological Risk Assessment* at 3-5 (Sept. 2002), *available at* http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=15219 [hereinafter Risk Assessment] (citing S.A. Ahlstedt, *Cumberlandian Mollusk Conservation Program: Mussel Surveys in Six Tennessee Valley Streams*, 5 WALKERANA 123 (1991)).
[3] *Id.* (citing B. Stein, et al., THE STATUS OF BIODIVERSITY IN THE UNITED STATES, The Nature Conservancy (2000)).

freshwater species in the United States." Likewise, the U.S. Army Corps of Engineers recognized that "the Clinch River is an aquatic resource of world wide and national significance that is in urgent need of protection to stabilize and help restore rare and endangered species populations, some of which occur no where else in the world."[4] The Clinch's mussel populations have been studied extensively because of the importance of the resource. In a 1989 article, Sally Dennis of Radford University, noted five surveys of the rivers' mussel that had been conducted since the adoption of the Clean Water Act in 1975 and described the Clinch as "one of the most studied rivers in the Upper Tennessee System."[5] This wealth of data demonstrate that the Clinch has lost mussel species since 1975.

A. Survey Data

Quantitative and qualitative mussel surveys of the Clinch and Powell Rivers were conducted from 1979 to 2004. Steve Ahlstedt has studied the mussel populations of the Clinch River for over 35 years now. In his most recent published survey report, he and his colleagues found the following:

> [L]ong-term trend monitoring of mussel populations since 1979 are showing that mussel population densities and species composition are rapidly declining in the Clinch especially in Virginia and the Powell River. Many species that were more common and widespread throughout the Clinch and Powell rivers in the mid-1970s currently exist as old eroded individuals or are extirpated from former habitats. The fauna that remains in the Powell River is severely impaired and a portion of the Clinch River in Virginia that includes Simone's Island…and Pendleton Island…is suffering a similar fate.[6]

The loss of species throughout both rivers in Virginia since the 1979 surveys shows that these rivers are impaired because they no longer support species that were found during the initial survey and therefore no longer meet their existing uses.[7]

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[4] U.S. Army Corps of Engineers, Nashville District, *Reconnaissance Study: Clinch River Basin Virginia: Section 905(b) (WRDA 1986) Analysis*, at 14 (Nov. 2004).

[5] S.D. Dennis, *Status of the Freshwater Mussel Fauna, Pendleton Island Mussel Preserve, Clinch River Virginia*, 72 STERKIANA 19 (1989).

[6] S.A. Ahlstedt et al., *Long Term Trend Information for Freshwater Mussel Populations at Twelve Fixed-Station Monitoring Sites in the Clinch and Powell Rivers…, Final Report*, U.S. Fish & Wildlife Service, Cookeville, TN, at 3 (2005) [hereinafter Ahlstedt 2005].

[7] We acknowledge the complexity of the survey data presented by Ahlstedt and his colleagues. In particular, we acknowledge that in certain locations, some species that were not found in earlier surveys have been found since, even as other have disappeared. The appearance of new species in any given location is irrelevant to the overall issue of whether that river segment is now completely supporting its existing use. Instead, existing use is determined by whether all species that were present and supported on November 28, 1975 are still present and supported in the river.

1. Powell River

The mussel fauna throughout the entire Virginia stretch of the Powell River is in severe decline. In six surveys taken during the period from 1979 to 2004, the number of mussel species in the Powell declined from 32 to 16.[8] This 50% decline is more alarming as "densities for some mussels are represented as single individuals."[9] Looking at the changes in mussel diversity[10] and density moving upstream from the Tennessee border into Virginia, it is clear that the problem is systemic throughout the river. Beginning at river mile (RM) 117.3 in Virginia,[11] the number of mussels per square meter declined from 11.14 in 1979 to 1.24 in 2004. Over the same period, the number of species found dropped from 16 to 7.[12] Upstream at RM 143.1, in just one decade from 1994 to 2004, the number of mussels per square meter dropped from 5.40 to 1.80.[13] With regard to diversity, there were three species found at that sampling location in 1994 that were not found in 2004.[14]

2. Clinch River

Survey data on the Clinch River's mussel populations show similar declines. At Speers Ferry (RM 211.1)[15] only 10 species were found in 2004, as compared with 13 species in 1988.[16] Moving farther upstream into Virginia, there is evidence of more severe declines. At Pendleton Island (RM 226.3), which was once one of the best mussel shoals on the Clinch River, species density dropped from 24.6 mussels per square meter in 1979 to only 4.6 mussels per square meter in 2004. The number of species likewise dropped dramatically from 21 to 10 in the same time period.[17] Simones Island (RM 235.1) populations declined as severely during the same 21-year time period. There were 7.7 mussels per square meter there in 1979 and only 1.7 in 2004. In 1983, there were 14 mussel species, and in 2004 there were only 6.[18]

B. Federally Endangered Mussel Species

In 1997 FWS determined that the threats to four mussel species extant in the Clinch and Powell Rivers warranted listing them as endangered under the Endangered Species Act (ESA).[19] FWS determined that listing was necessary because populations of

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[8] Ahlstedt 2005 at 8.
[9] *Id.*
[10] I often use "species diversity" or "mussel diversity" as a surrogate to indicate that species have been lost. However, the number of individual species lost in a particular stretch during a particular time span may exceed the difference in species diversity over time because of occurrences of new species during that time.
[11] RM 116 and higher are in Virginia.
[12] Ahlstedt 2005 at Table 13.
[13] *Id.* at Table 15.
[14] *Id.*
[15] RM 202 and higher are in Virginia.
[16] Ahlstedt 2005 at Table 6.
[17] *Id.* at Table 7.
[18] *Id.* at Table 8.
[19] FWS, *Determination of Endangered Status for the Cumberland elktoe, Oyster mussel, Cumberlandian combshell, Purple bean, and Rough rabbitsfoot*, 62 Fed. Reg. 1647, 1648-49 (10 Jan. 1997) [hereinafter 1997 Listing].

the mussels had "undergone significant reductions in range and …now exist only as remnant isolated populations."[20] Pursuant to the listing, in 2004 FWS designated approximately 43 miles of the Powell River in Virginia and all of the Virginia portion of the Clinch River and two of its tributaries as critical habitat for the four mussels.[21] These are the river reaches FWS determined are "essential to the conservation of the species."[22] In 2004 FWS also prepared a Recovery Plan for the mussels.[23] The plan identified approximately eleven possible reasons for decline in the mussel populations. Of those, mineral extraction, contaminants, toxic spills, and sedimentation would constitute pollutants causing or contributing to violations in Virginia's general and designated use standards.

The Recovery Plan demonstrates that many of these four mussels were extant in the Clinch and Powell Rivers in Virginia since 1975 and are therefore part of the rivers' existing aquatic life for purposes of determining the existing use component of state water quality standards for these waters. The Plan also shows that the mussels have been extirpated throughout much of the two rivers in Virginia. The rivers' inabilities to support these populations constitute a water quality violation that requires listing as impaired under Category 5.

The federally endangered oyster mussel, in particular, is indicative of the overall extent of declines in these two rivers because of its historic wide distribution there.[24] The oyster mussel has been extirpated from the Powell River and from the Clinch River above Carbo. The mussel has also likely been extirpated from Copper Creek.[25] Despite no longer being found in many reaches of the Clinch and Powell Rivers in Virginia, evidence presented by FWS shows that these mussels have been found in the rivers since 1975. The oyster mussel was found in the Russell County portion of the Clinch as recently 1985.[26] It was found in the Copper Creek tributary to the Clinch in 1980 and 1981.[27] The oyster mussel was found in the Powell River in Lee County, Virginia in 1975-78, 1979, 1981, 1983, and 1988-89.[28]

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[20] *Id.* at 1654.
[21] FWS, *Designation of Critical Habitat for Five Endangered Mussels in the Tennessee and Cumberland River Basins; Final Rule*, 69 Fed. Reg. 53136, 53166-69 (31 Aug. 2004) [hereinafter Critical Habitat Designation]. FWS also noted that the designation areas in the Clinch and Powell overlapped with existing critical habitat designations for the yellowfin madtom and slender chub. *Id.* at 53152 (citing 42 Fed. Reg. 45527).
[22] *Id.* at 53148; *see also* 16 U.S.C. §1532(5)(A).
[23] FWS, *Recovery Plan for Cumberland Elktoe, Oyster Mussel, Cumberland Combshell, Purple Bean, and Rough Rabbitsfoot*, 35-39 (7 July 2004), *available at* http://ecos.fws.gov/docs/recovery_plans/2004/040524.pdf [hereinafter Recovery Plan].
[24] *Id.* at 9.
[25] *Id.* at 10.
[26] *Id.* at 132. Most of the Clinch River's river miles in Russell County are upstream of Carbo.
[27] *Id.*
[28] *Id.* at 133.

The entire range of the Purple bean mussel is limited to Southwest Virginia and Northeast Tennessee.[29] The Purple bean was once considered "not rare" in the Virginia portion of the Clinch River. It currently exists only as small populations in the Clinch that are in decline. Two large populations of Purple bean in the upper portion of the Clinch River and Indian Creek and in Scott County's Copper Creek have been severely decimated in the past two decades. Until 1998 the largest population of Purple bean was thought to be in the Indian Creek and upper Clinch River area.[30] In 1998 a chemical spill there killed more than 7000 mussels of 16 species. 250 kills of federally listed mussels were confirmed.[31] In 2004 scientist concluded that the "incident has significantly impeded recovery of …three endangered mussel species [including the Purple bean] in the upper Clinch River, which are now restricted to the lower 1200 m reach of Indian Creek."[32] As recently 1991, the Copper Creek population was considered by one expert to be the largest, however, a 1998 survey revealed only two mussels.[33]

The historic range of the Rough rabbitsfoot mussel is even more narrow. It is restricted to the upper portions of the Clinch, Powell, and Holston Rivers, "making it one of the more narrowly distributed species endemic to the Cumberlandian region."[34] Remaining populations exist only in the Clinch and Powell Rivers. The mussel has "suffered marked decline in Virginia."[35] It is likely that the only viable populations exist in the upper Clinch River.[36] In 1980, it was found in Copper Creek, but it was not found in 1998 and "may be extirpated" from that tributary.[37] The Recovery Plan cites publications in 1986 and 1991 for the proposition that the rough rabbitsfoot population at Pendleton Island in Virginia was particularly strong.[38] While a 1979 survey showed a density of 1.3 mussels per square meter at that location; none were found in surveys conducted in 1994, 1999, and 2004.[39] In her 1987 sampling of the Pendleton Island site, Dennis found only two rough rabbitsfoot mussels.[40]

While the survey results discussed above indicate declines in the species composition of both rivers, the data on the rivers' newly listed endangered species in particular highlight the impact of the declines on some of the rivers' most sensitive species.

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[29] *Id.* at 14.
[30] *Id.*
[31] *Id.* at 41.
[32] Jess Jones, Richard Neves, *Survey of Freshwater Mussel Populations in Indian Creek, Tazewell County, Virginia*, at 1-2 (Nov. 2004).
[33] Recovery Plan at 14-15.
[34] *Id.* at 15.
[35] *Id.* at 16
[36] *See id.*
[37] *Id.* at 15.
[38] *Id.* at 16.
[39] Ahlstedt 2005 at Table 7.
[40] Dennis at 22.

II. Declines Show Violations or Future Violations in Water Quality Standards

The data above demonstrate that the Clinch and Powell Rivers are unable to support healthy communities of their numerous indigenous mussel species. The data also show that many of the species that are part of the rivers' existing uses are no longer supported. A waterway is impaired when its water quality standards are not being supported, met, or both.[41] In such cases, the state must list the water as threatened or impaired under Category 5 on its 303(d) list, except in certain situations that do not apply here.[42] The mussel data discussed above shows that the Clinch and Powell do not meet Virginia's general criteria and designated aquatic life use standards.[43] Virginia's general criteria water quality standard is violated when pollutants in waters interfere directly or indirectly with the waters designated use or "are inimical or harmful to …aquatic life."[44] All Virginia waters are designated for, among other things, "the propagation and growth of a balanced, indigenous population of aquatic life."[45] Virginia's designated use must include, at a minimum, all existing uses.[46]

III. Data considerations

Virginia must consider all existing, readily available data in its listing decisions.[47] If such data are sufficient to determine that a pollutant may be causing or is projected to cause an impairment, Category 5 listing is required, even when the pollutant or source of the pollutant is unknown.[48] Listing assessments require robust data. In particular, "a valid assessment of a segment's condition should involve drawing conclusions beyond those which would be arrived at by taking into account nothing more than …a typical set of ambient data."[49] Instead, the state should also consider any data on observed effects, which include evidence of depressed populations.[50] Virginia should consider evidence of observed declines in mussel diversity and density in these rivers.

Mussel trend are also particularly useful in assessing a river's ability to support its indigenous species because mussels are excellent bioindicators. Their health reflects the overall health of the rivers. Mussels are long-lived filter feeders; and they are sedentary and unable to avoid environmental stress.

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[41] EPA Watershed Branch, *Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b), and 314 of the Clean Water Act* at 47 (29 July 2005), *available at* http://www.epa.gov/owow/tmdl/2006IRG/report/2006irg-report.pdf [hereinafter 2006 Listing Guidance]; *See also id.* at 59; 40 C.F.R. §130.2(j).

[42] Listing Guidance at 47. *See also id.* at 53-57 (describing the limited situations in which a Category 4 listing is appropriate).

[43] 9 VAC-260-20 and 9 VAC 25-260-10.

[44] 9 VAC-260-20A.

[45] 9 VAC 25-260-10.

[46] *See* 9 VAC 25-260-30(A)(1). ("As a minimum, existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.").

[47] 40 CFR §130.7(b)(5).

[48] Listing Guidance at 60. ("[I]f a designated use is not supported and the segment is impaired or threatened, the fact that the specific pollutant is not known does not provide a basis for excluding the segment from Category 5.")

[49] *Id.* at 38.

[50] *Id.* at 30, 68.

Mussel trend data are better for determining the health of the Clinch and Powell Rivers than the ambient water monitoring and benthic sampling that are typically used. Neither ambient water monitoring nor benthic samples are likely to assess the impacts of episodic events. Non-continuous ambient monitoring would only catch a pollution spill by chance. Benthic samples assess only the health of water bugs. These insects have fast reproduction cycles and therefore recover quickly from such pollution impacts. Therefore, a benthic assessment may not show an acute pollution impact because the bugs may have time to recover before an assessment is performed. On the other hand, because mussels are sensitive to chemical pollutants and are slow to recover from negative impacts, they demonstrate harm to the watershed in a way that is not caught by the conventional assessment methods.

Acute pollution events are a significant concern in both of these watersheds. Spills have significantly hampered the ability of these rivers to maintain indigenous aquatic populations. As one example, FWS notes that a chemical spill in 1998 in the upper portion of the Clinch River significantly impacted the largest known population of the endangered Purple bean mussel.[51] FWS acknowledged the impact that such spills can have on species in its 1997 Listing: "[B]ecause most of the extant populations of these mussels are restricted to short river reaches, they are very vulnerable to extirpation from a single catastrophic event, such as a toxic chemical spill...."[52] Likewise, EPA's risk assessment found, "[e]pisodic chemical or coal slurry spills, although low in frequency and duration in this watershed, have undoubtedly had a significant impact on mussel and native fish species abundance and distribution."[53] For these reasons, the mussel population trend data provide Virginia with important information about cumulative and acute toxicity exposures, which can be used to help determine the cause or causes of impairment.

IV. Independent Applicability Test

EPA's independent applicability policy is intended to "protect against dismissing valuable information when evaluating aquatic life use support, particularly in detecting impairment."[54] The premise of the policy is "that any valid, representative dataset indicating an actual or projected water quality impairment should not be ignored when one is determining the appropriate action to be taken."[55] This policy requires that Virginia examine each potential violation of a water quality standard independent of all other violations or attainments. For that reason, evidence that these rivers or portions of them are supporting indigenous populations of other aquatic life cannot be used to dismiss concerns about declines in mussel species or to support a decision not to list. Listing is required when there is impairment of any resident species, including mussels.

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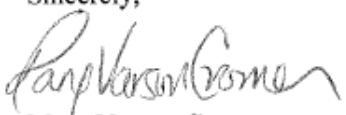
[51] Recovery Plan at 14.
[52] 1997 Listing at 1655.
[53] Risk Assessment at 1-6.
[54] Listing Guidance at 43.
[55] *Id.*

V. Conclusion

It is clear that numerous species of native mussels have disappeared from the Clinch and Powell Rivers, and at least some of their tributaries, since 1975. The disappearance of aquatic species constitutes a violation of Virginia water quality standards and requires listing as impaired waters.

I would be happy to provide you with any of the references cited herein that you do not have readily available. Please contact me or Rick Parrish at (434) 977-4090 if you have any questions about these comments. We appreciate the opportunity to comment in this matter and look forward to the development of the final 2008 303(d) list.

Sincerely,



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RESPONSE:

The Virginia Department of Environmental Quality (VADEQ) fully supports all activities to study and protect the endangered species found in the Clinch and Powell watersheds and fully recognizes the need to protect and preserve this important natural resource. However, the VADEQ believes that listing these waters prior to a more scientific review of the situation is premature and will not advance the protection of these organisms.

VADEQ also believes listing the Clinch and Powell Rivers as threatened or impaired is premature because no objective IBI threshold for native freshwater, endangered mussels has been developed. Since there is no listing threshold, there also exists no attainment goal for the use and subsequent delisting.

VADEQ believes that further information on the mussels' populations and their status is needed before beginning a TMDL listing process. Therefore, VADEQ supports the efforts of the Clinch-Powell Clean Rivers Initiative group of which we are a part. The goals of this group are to bring together the scientists, regulators and natural resources agencies to inventory existing freshwater mussel data, identify specific data needs, coordinate further data collection, and determine if stressors are natural or anthropogenic. We have also committed to work toward this end in a memorandum of understanding (MOU) between the states of Tennessee and Virginia and EPA Region 3 and 4. VADEQ feels that these efforts are a logical first step and must take place prior to listing these streams as impaired since modeling tools are currently not available for such TMDL development.

VADEQ wishes to be proactive in these watersheds with on-the-ground activities while the MOU group is involved in research. Therefore, VADEQ proposes to accelerate the TMDL studies for bacteria and aquatic life use impairments in the 48 miles of impairments on the main stem of the Powell River between Big Stone Gap and the TN/VA state line. VADEQ is proposing a 2010 completion deadline for this TMDL project. VADEQ believes that Best Management Practice (BMP) type controls that would be installed in a future TMDL implementation plan will benefit the entire aquatic community including the native mussel population.

VADEQ will also immediately conduct special benthic monitoring throughout the Clinch River Basin, in September 2008, at over three dozen sites, to obtain a more comprehensive picture of the river basin and determine at specific locations whether existing aquatic life indicators provide evidence of water quality problems. These sites will be assessed in the next (2010) Water Quality Assessment Report. In the 2008 report, VADEQ will re-categorize the entire Clinch River mainstem, which has either federally or state designated endangered or threatened aquatic species, as "Waters of Concern" with an observed effect. This designation means that these areas will remain a priority for additional monitoring in the future.

VADEQ further proposes requirements of additional treatment for ammonia for new and /or expanding wastewater treatment systems. Research has been presented to EPA and DEQ that supports a lowering the ammonia water quality standard to protect freshwater mussels. However, the process of amending the ammonia water quality criteria will take a couple of years. VADEQ wishes to act immediately to require these facilities to design to meet the proposed lower ammonia standard in advance of the criteria becoming effective. In addition, VADEQ will

immediately implement tighter restrictions on mixing zones for these new or expanded discharges into the Clinch and Powell Rivers.

SAVE OUR CUMBERLAND MOUNTAINS (SOCM)

RE: Draft 2008 305(b)/303(d) Water Quality Assessment Integrated Report

Dear Mr. Glover,

Thank you for the opportunity to comment on Virginia's draft 2008 305(b) and 303(d) report. I am writing on behalf of the Strip-mine Issues Committee of Save Our Cumberland Mountains. Our interest in your report primarily concerns the Tennessee-Big Sandy River Basin, especially the data on the Clinch and Powell rivers, which flow from southwestern Virginia coalfields into east Tennessee.

TDEC's 2008 305(b) report listed the Clinch River as threatened, based on loss of aquatic species. While the Clinch hosts more than 126 species of native fish and 44 different mussels, it also has the highest number of globally imperiled and vulnerable freshwater species in the entire United States. In the Virginia reaches of the Clinch, there are 38 active coalmines.

TDEC also listed the Powell River as impaired. At one time there were at least 90 native fish species and 41 mussel species in those waters. Of the species that are left, 2 fish and 7 mussel species are federally listed. In Virginia, the upper Powell watershed has 48 mines in operation.

An EPA watershed risk assessment shows that mining and agriculture in southwestern Virginia accounts for significant declines in populations of aquatic species. Tennessee's 2008 report acknowledges that the full reach of both the Powell and the Clinch has been adversely impacted by coal mining and other human activity, and that both rivers need all the protection they can get.

We understand from your report that the state of Tennessee has requested that Virginia list the Powell as impaired, based on loss of endangered mussels. In addition, Tennessee has determined that water quality conditions of the Clinch River are degraded at its point of entry into Tennessee from Virginia, and has asked Virginia to list the Clinch as threatened.

Over the past 5 years SOCM has worked with Governor Bredesen and TDEC to encourage the strongest protection possible for Tennessee waters impacted by surface mining operations, especially mountaintop removal. Adverse impacts to watershed health by surface mining in Tennessee are becoming a significant threat to the quality of life in our communities. We certainly have an interest that our problems not be compounded by pollution entering Tennessee from other states.

As an organization committed to the health and security of our communities and watersheds, we respectfully ask Virginia to honor the request of Tennessee to list the Powell and Clinch as impaired and threatened, respectively, along their full reaches. We also ask that Virginia acknowledge the negative impacts of surface mining and agriculture in the headwaters and downstream reaches of the Powell and the Clinch, and do whatever it takes to correct this situation.

Sincerely,

Cathie Bird
Chair, SOCM Strip-mine Issues Committee

RESPONSE:

The Virginia Department of Environmental Quality (VADEQ) fully supports all activities to study and protect the endangered species found in the Clinch and Powell watersheds and fully recognizes the need to protect and preserve this important natural resource. However, the VADEQ believes that listing these waters prior to a more scientific review of the situation is premature and will not advance the protection of these organisms.

VADEQ also believes listing the Clinch and Powell Rivers as threatened or impaired is premature because no objective IBI threshold for native freshwater, endangered mussels has been developed. Since there is no listing threshold, there also exists no attainment goal for the use and subsequent delisting.

VADEQ believes that further information on the mussels' populations and their status is needed before beginning a TMDL listing process. Therefore, VADEQ supports the efforts of the Clinch-Powell Clean Rivers Initiative group of which we are a part. The goals of this group are to bring together the scientists, regulators and natural resources agencies to inventory existing freshwater mussel data, identify specific data needs, coordinate further data collection, and determine if stressors are natural or anthropogenic. We have also committed to work toward this end in a memorandum of understanding (MOU) between the states of Tennessee and Virginia and EPA Region 3 and 4. VADEQ feels that these efforts are a logical first step and must take place prior to listing these streams as impaired since modeling tools are currently not available for such TMDL development.

VADEQ wishes to be proactive in these watersheds with on-the-ground activities while the MOU group is involved in research. Therefore, VADEQ proposes to accelerate the TMDL studies for bacteria and aquatic life use impairments in the 48 miles of impairments on the main stem of the Powell River between Big Stone Gap and the TN/VA state line. VADEQ is proposing a 2010 completion deadline for this TMDL project. VADEQ believes that Best Management Practice (BMP) type controls that would be installed in a future TMDL implementation plan will benefit the entire aquatic community including the native mussel population.

VADEQ will also immediately conduct special benthic monitoring throughout the Clinch River Basin, in September 2008, at over three dozen sights, to obtain a more comprehensive picture of specific locations and determine where existing aquatic life indicators indicate water quality problems. These sites will be assessed in the next (2010) Water Quality Assessment Report. In the 2008 report, VADEQ will re-categorize the entire Clinch River mainstem, which has either federally or state designated endangered or threatened aquatic species, as "Waters of Concern" with an observed effect. This designation means that these areas will remain a priority for additional monitoring in the future.

VADEQ further proposes requirements of additional treatment for ammonia for new and /or expanding wastewater treatment systems. Research has been presented to EPA and DEQ that supports a lowering the ammonia water quality standard to protect freshwater mussels. However, the process of amending the ammonia water quality criteria will take a couple of years. VADEQ wishes to act immediately to require these facilities to design to meet the proposed lower ammonia standard in advance of the criteria becoming effective. In addition, VADEQ will immediately implement tighter restrictions on mixing zones for these new or expanded discharges into the Clinch and Powell Rivers.

Comments on Draft 2008 305(b)/303(d) Water Quality Assessment Integrated Report

Submitted by
Susan M. Laufer
Environmental Scientist
Friends of Accotink Creek
8617 Janet Lane
Vienna, VA 22180
571-830-6719

Dear Mr. Glover:

In regard to the recent Draft 2008 3035b/303d Water Quality Assessment Report, I wish to provide comments on a serious and misleading aspect of this report—the omission of a very large subset of "existing and readily available water quality-related data and information."

This reference "to existing and readily available water quality related data" is from the Code of Federal Regulation: 40 CFR Part 130 PART 130—WATER QUALITY PLANNING AND MANAGEMENT. This is the regulation upon which the USEPA bases its guidance documents issued to the states regarding the identification of impaired waters and the development and submission of biennial Water Quality Assessment Reports.

The very large subset of data to which I am referring is from the comprehensive and very high quality data found within Fairfax County's Department of Public Works and Environmental Services. This data set would be categorized as "Waters for which water quality problems have been reported by local, state, or federal agencies; members of the public; or academic institutions," which is one of the categories which must be considered both under § 130.7 (TMDLs) and § 130.10 (State submittals to EPA).

Fairfax County issues an Annual Report on the Environment in which it describes current conditions of its water resources. For example, on page 69 of its 2005 Report, under the subheading "Water Resource Analyses" the following text can be found:

> "The Fairfax County Department of Public Works and Environmental Services (DPWES), Virginia Department of Environmental Quality (VDEQ), and other organization and agencies conduct water quality monitoring and testing. The Audubon Naturalist Society, the Northern Virginia Soil and Water Conservation District, and the Health Department Adopt-a Stream program also provide volunteer data. DPWES continues to conduct comprehensive monitoring of Fairfax County streams. All of these data provide a comprehensive understanding of the condition and health of Fairfax County's water resources."

According to 40 CFR 130, not only is Virginia DEQ required to evaluate these data, since they certainly are "existing and readily available," it must provide a rationale for omitting the use of these data when determining impairment under 303(b) and 303(d) sections of the Clean Water Act.

In addition, the Fairfax County Health Department has publicly announced that all the streams within the county are NOT suitable for recreational purposes. Together with the Fairfax County's "Annual Report on the Environment," these reports are based on high quality environmental data. At a minimum they must be considered by the state when identifying impaired waters under 305b and 303d.

To NOT use these reports and data in its Water Quality Assessment Report, the Virginia DEQ is purposely misleading the public and USEPA on the condition of its water resources. To base its listing of water-quality limited water (303d) on one or two monitoring events when in fact a wealth of data can be easily accessed, verified, and incorporated into its own Assessment Report, is contrary to the very clear federal environmental objective to identify the extent to which there is existing water quality impairment within each and every state.

I hope that you will consider these comments thoughtfully. They are not frivolous. To exclude waters with known impairment from its Assessment Report is misleading. To not consider the wealth of easily accessible environmental data upon which Fairfax County develops its own assessment reports is to side-step the 303(d) process altogether and thus DEQ's abdicates its responsibility to protect human health and aquatic life.

Sincerely,

Susan M. Laufer

Reference:
Title 40: Protection of Environment

PART 130—WATER QUALITY PLANNING AND MANAGEMENT

Section Contents

§ 130.12 Coordination with other programs.

§ 130.15 Processing application for Indian tribes.

Authority: 33 U.S.C. 1251 *et seq.*

Source: 50 FR 1779, Jan. 11, 1985, unless otherwise noted.

§ 130.0 Program summary and purpose.

(a) This subpart establishes policies and program requirements for water quality planning, management and implementation under sections 106, 205(j), non-construction management 205(g), 208, 303 and 305 of the Clean Water Act.

§ 130.7 Total maximum daily loads (TMDL) and individual water quality-based effluent limitations.

(a) *General.* The process for identifying water quality limited segments still requiring wasteload allocations, load allocations and total maximum daily loads (WLAs/LAs and TMDLs), setting priorities for developing these loads; establishing these loads for segments identified, including water quality monitoring, modeling, data analysis, calculation methods, and list of pollutants to be regulated; submitting the State's list of segments identified, priority ranking, and loads established (WLAs/LAs/TMDLs) to EPA for approval; incorporating the approved loads into the State's WQM plans and NPDES permits; and involving the public, affected dischargers, designated areawide agencies, and local governments in this process shall be clearly described in the State Continuing Planning Process (CPP).

(b) Identification and priority setting for water quality-limited segments still requiring TMDLs.

(1) Each State shall identify those water quality-limited segments still requiring TMDLs within its boundaries for which:

(i) Technology-based effluent limitations required by sections 301(b), 306, 307, or other sections of the Act;

(ii) More stringent effluent limitations (including prohibitions) required by either State or local authority preserved by section 510 of the Act, or Federal authority (law, regulation, or treaty); and

(iii) Other pollution control requirements (e.g., best management practices) required by local, State, or Federal authority are not stringent enough to implement any water quality standards (WQS) applicable to such waters.

(2) Each State shall also identify on the same list developed under paragraph (b)(1) of this section those water quality-limited segments still requiring TMDLs or parts thereof within its boundaries for which controls on thermal discharges under section 301 or State or local requirements are not stringent enough to assure protection and propagation of a balanced indigenous population of shellfish, fish and wildlife.

(3) For the purposes of listing waters under §130.7(b), the term “water quality standard applicable to such waters” and “applicable water quality standards” refer to those water quality standards established under section 303 of the Act, including numeric criteria, narrative criteria, waterbody uses, and antidegradation requirements.

(4) The list required under §§130.7(b)(1) and 130.7(b)(2) of this section shall include a priority ranking for all listed water quality-limited segments still requiring TMDLs, taking into account the severity of the pollution and the uses to be made of such waters and shall identify the pollutants causing or expected to cause violations of the applicable water quality standards. The priority ranking shall specifically include the identification of waters targeted for TMDL development in the next two years.

(5) Each State shall assemble and evaluate all existing and readily available water quality-related data and information to develop the list required by §§130.7(b)(1) and 130.7(b)(2). At a minimum “all existing and readily available water quality-related data and information” includes but is not limited to all of the existing and readily available data and information about the following categories of waters:

(i) Waters identified by the State in its most recent section 305(b) report as “partially meeting” or “not meeting” designated uses or as “threatened”;

(ii) Waters for which dilution calculations or predictive models indicate nonattainment of applicable water quality standards;

(iii) Waters for which water quality problems have been reported by local, state, or federal agencies; members of the public; or academic institutions. These organizations and groups should be actively solicited for research they may be conducting or reporting. For example, university researchers, the United States Department of Agriculture, the National Oceanic and Atmospheric Administration, the United States Geological Survey, and the United States Fish and Wildlife Service are good sources of field data; and

(iv) Waters identified by the State as impaired or threatened in a nonpoint assessment submitted to EPA under section 319 of the CWA or in any updates of the assessment.

(6) Each State shall provide documentation to the Regional Administrator to support the State's determination to list or not to list its waters as required by §§130.7(b)(1) and 130.7(b)(2). This documentation shall be submitted to the Regional Administrator together with the list required by §§130.7(b)(1) and 130.7(b)(2) and shall include at a minimum:

(i) A description of the methodology used to develop the list; and

(ii) A description of the data and information used to identify waters, including a description of the data and information used by the State as required by §130.7(b)(5); and

(iii) A rationale for any decision to not use any existing and readily available data and information for any one of the categories of waters as described in §130.7(b)(5); and

(iv) Any other reasonable information requested by the Regional Administrator. Upon request by the Regional Administrator, each State must demonstrate good cause for not including a water or waters on the list. Good cause includes, but is not limited to, more recent or accurate data; more sophisticated

water quality modeling; flaws in the original analysis that led to the water being listed in the categories in §130.7(b)(5); or changes in conditions, e.g., new control equipment, or elimination of discharges.

§ 130.10 State submittals to EPA.

….(6) Each state shall assemble and evaluate all existing and readily available water quality-related data and information and each state shall develop the lists required by paragraphs (d)(1), (2), and (3) of this section based upon this data and information. At a minimum, all existing and readily available water quality-related data and information includes, but is not limited to, all of the existing and readily available data about the following categories of waters in the state:

(i) Waters where fishing or shellfish bans and/or advisories are currently in effect or are anticipated.

(ii) Waters where there have been repeated fishkills or where abnormalities (cancers, lesions, tumors, etc.) have been observed in fish or other aquatic life during the last ten years.

(iii) Waters where there are restrictions on water sports or recreational contact.

(iv) Waters identified by the state in its most recent state section 305(b) report as either “partially achieving” or “not achieving” designated uses.

(v) Waters identified by the states under section 303(d) of the CWA as waters needing water quality-based controls.

(vi) Waters identified by the state as priority waterbodies. (State Water Quality Management plans often include priority waterbody lists which are those waters that most need water pollution control decisions to achieve water quality standards or goals.)

(vii) Waters where ambient data indicate potential or actual exceedances of water quality criteria due to toxic pollutants from an industry classified as a primary industry in appendix A of 40 CFR part 122.

(viii) Waters for which effluent toxicity test results indicate possible or actual exceedances of state water quality standards, including narrative “free from” water quality criteria or EPA water quality criteria where state criteria are not available.

(ix) Waters with primary industrial major dischargers where dilution analyses indicate exceedances of state narrative or numeric water quality criteria (or EPA water quality criteria where state standards are not available) for toxic pollutants, ammonia, or chlorine. These dilution analyses must be based on estimates of discharge levels derived from effluent guidelines development documents, NPDES permits or permit application data (e.g., Form 2C), Discharge Monitoring Reports (DMRs), or other available information.

(x) Waters with POTW dischargers requiring local pretreatment programs where dilution analyses indicate exceedances of state water quality criteria (or EPA water quality criteria where state water quality criteria are not available) for toxic pollutants, ammonia, or chlorine. These dilution analyses must be based upon data from NPDES permits or permit applications (e.g., Form 2C), Discharge Monitoring Reports (DMRs), or other available information.

(xi) Waters with facilities not included in the previous two categories such as major POTWs, and industrial minor dischargers where dilution analyses indicate exceedances of numeric or narrative state water quality criteria (or EPA water quality criteria where state water quality criteria are not available) for toxic pollutants, ammonia, or chlorine. These dilution analyses must be based upon estimates of discharge levels derived from effluent guideline development documents, NPDES permits or permit application data, Discharge Monitoring Reports (DMRs), or other available information.

(xii) Waters classified for uses that will not support the "fishable/swimmable" goals of the Clean Water Act.

(xiii) Waters where ambient toxicity or adverse water quality conditions have been reported by local, state, EPA or other Federal Agencies, the private sector, public interest groups, or universities. These organizations and groups should be actively solicited for research they may be conducting or reporting. For example, university researchers, the United States Department of Agriculture, the National Oceanic and Atmospheric Administration, the United States Geological Survey, and the United States Fish and Wildlife Service are good sources of field data and research.

7) Each state shall provide documentation to the Regional Administrator to support the state's determination to list or not to list waters as required by paragraphs (d)(1), (d)(2) and (d)(3) of this section. This documentation shall be submitted to the Regional Administrator together with the lists required by paragraphs (d)(1), (d)(2), and (d)(3) of this section and shall include as a minimum:

(i) A description of the methodology used to develop each list;

(ii) A description of the data and information used to identify waters and sources including a description of the data and information used by the state as required by paragraph (d)(6) of this section;

(iii) A rationale for any decision not to use any one of the categories of existing and readily available data required by paragraph (d)(6) of this section; and

(iv) Any other information requested by the Regional Administrator that is reasonable or necessary to determine the adequacy of a state's lists. Upon request by the Regional Administrator, each state must demonstrate good cause for not including a water or waters on one or more lists. Good cause includes, but is not limited to, more recent or accurate data; more accurate water quality modeling; flaws in the original analysis that led to the water being identified in a category in §130.10(d)(6); or changes in conditions, e.g., new control equipment, or elimination of discharges.

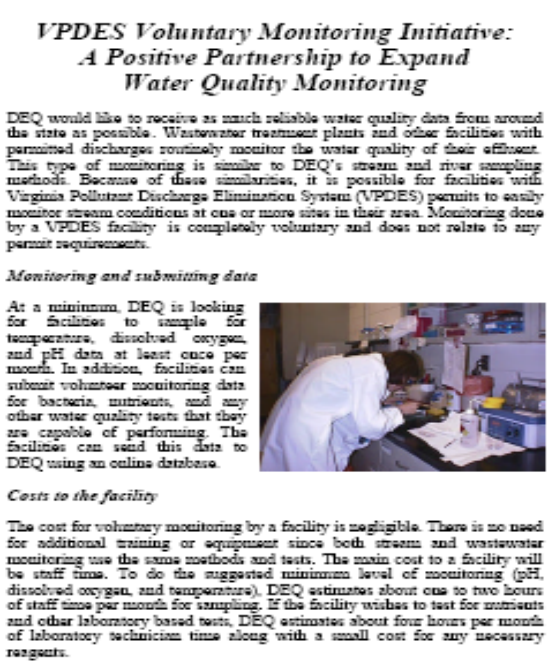
RESPONSE:

The Virginia Department of Environmental Quality (DEQ) makes a concerted effort to solicit water quality data from third party (non-agency) sources as referenced in 40 CFR Part 130 *Water Quality Planning and Management* §130.7 and §130.10. However, all non-agency data submitted to DEQ is done so on a voluntary basis. To date, we have not received any data from the Fairfax County Department of Public Works and Environmental Services (DPWES). In addition, DEQ does not have the authority to require drinking water utilities to provide source water quality data except in extremely limited situations.

When DEQ receives non-agency data, it undergoes a vetting process that ensures the data meet a sufficient level of quality assurance. This vetting process organizes the data into three main levels of quality assurance outlined in Appendix 9 of the *Virginia Citizen Water Quality Monitoring Program Methods Manual*. This process, along with the written consent of the generator of the data, determines to what degree, if any, DEQ can use data in a Water Quality Assessment Report. A copy of the manual is available for download from our website www.deq.virginia.gov/cmontior. If Fairfax County DPWES wishes to submit monitoring data to DEQ, it would undergo the same evaluation process as any other non-agency data received by the agency.

Virginia is one of the leading states in the country to incorporate third-party data in the 305(b)/303(d) Integrated Water Quality Assessment Report. The 2008 report included water quality data from approximately 1,200 stations monitored by citizen monitoring groups, localities, and non-DEQ government agencies. In addition, DEQ makes an effort to approach wastewater and water treatment facilities to monitor and voluntarily provide water quality data from nearby streams, lakes, and rivers. Included is a copy of a brochure DEQ sends to facilities explaining the benefits of the initiative. Through this effort, we have received monitoring data from Newport News Department of Public Works and the Abingdon Wastewater Treatment Facility. We would welcome the opportunity for Fairfax County DWPES to share their results and firmly believe that both parties could benefit. To this end, we will approach Fairfax County to see if they wish to submit data for inclusion in future reports.

If you have any questions relating to the DEQ program to approach non-agency groups, please contact Mr. James Beckley by e-mail at jebeckley@deq.virginia.gov or by phone at (804) 698-4025.



VPDES Voluntary Monitoring Initiative: A Positive Partnership to Expand Water Quality Monitoring

DEQ would like to receive as much reliable water quality data from around the state as possible. Wastewater treatment plants and other facilities with permitted discharges routinely monitor the water quality of their effluent. This type of monitoring is similar to DEQ's stream and river sampling methods. Because of these similarities, it is possible for facilities with Virginia Pollutant Discharge Elimination System (VPDES) permits to easily monitor stream conditions at one or more sites in their area. Monitoring done by a VPDES facility is completely voluntary and does not relate to any permit requirements.

Monitoring and submitting data

At a minimum, DEQ is looking for facilities to sample for temperature, dissolved oxygen, and pH data at least once per month. In addition, facilities can submit volunteer monitoring data for bacteria, nutrients, and any other water quality tests that they are capable of performing. The facilities can send this data to DEQ using an online database.

Costs to the facility

The cost for voluntary monitoring by a facility is negligible. There is no need for additional training or equipment since both stream and wastewater monitoring use the same methods and tests. The main cost to a facility will be staff time. To do the suggested minimum level of monitoring (pH, dissolved oxygen, and temperature), DEQ estimates about one to two hours of staff time per month for sampling. If the facility wishes to test for nutrients and other laboratory based tests, DEQ estimates about four hours per month of laboratory technician time along with a small cost for any necessary reagents.

Benefits

- **Gain valuable information about nearby streams** – Facilities will benefit from voluntary monitoring by learning more about the water quality of their receiving streams or adjacent waters.
- **Help locate water pollution problems** – If there is an unexplained fish kill or similar event, voluntary monitoring could show that the cause was from a source upstream of the plant.
- **Positive interaction with the community** – Voluntary stream sampling could help educate the public about the effectiveness of wastewater treatment. For example, a facility could partner with local schools to do stream sampling as part of a plant tour. Students could compare the stream monitoring data to the facility effluent results to demonstrate the efficiency of wastewater treatment.
- **Promote environmental partnerships** – With voluntary monitoring, facilities could show their interest in protecting water quality. This could help open a positive dialogue with local citizen monitoring and other environmental groups. For example, a facility could offer a local citizen monitoring group access to their voluntary monitoring data, laboratory space to test stream samples, and technical experience of their employees.
- **Earn public recognition** – Participating facilities may receive awards that recognize their environmental stewardship.

HAMPTON ROADS
PLANNING DISTRICT COMMISSION

JUL 1 8 2008

July 17, 2008

Mr. Darryl Glover
DEQ Water Quality Monitoring and Assessment Manager
P.O. Box 1105
Richmond, Virginia 23218

Re: Comments on 2008 Water Quality Assessment and Impaired Waters Integrated Report (POW:Water Quality Standards)

Dear ~~Mr. Glover~~ Darryl:

The staff of the Hampton Roads Planning District Commission is pleased to offer its comments on the referenced document. These comments reflect discussion by the HRPDC Joint Environmental Committee on July 10, 2008. We recognize DEQ's efforts to improve the assessment of water quality in Virginia. The importance of quality monitoring data is highlighted by the increased stringency of regulatory programs especially for MS4 Localities. We applaud DEQ's efforts to increase the spatial coverage of water quality monitoring data. However, we have some concerns about the temporal resolution of the data and the lack of continuity between water quality assessment reports.

The Department of Environmental Quality's increased monitoring efforts have resulted in improved spatial resolution of data throughout Virginia, but have resulted in decreased frequency of monitoring at all monitoring stations from monthly to every other month. This decrease in monitoring frequency makes it more difficult to accurately measure water quality of Virginia's waterbodies. We encourage DEQ to continue to invest resources in the monitoring program to improve both spatial and temporal resolution of water quality data.

The 2006 Integrated Report included a trend analysis that reported whether selected waterbodies were getting cleaner or dirtier. This information was not included in the 2008 Integrated Report. This is exactly the type of information that is most useful to localities to gauge the effectiveness of their water quality improvement efforts. We encourage DEQ to continue conducting trend analyses at selected stations throughout the Commonwealth and to include that information in subsequent Integrated Reports.

Thank you for the opportunity to review the 2008 Integrated Report.

Sincerely,

John M. Carlock, AICP
Deputy Executive Director of Physical Planning

JLT/JMC/mkf

HEADQUARTERS • THE REGIONAL BUILDING • 723 WOODLAKE DRIVE • CHESAPEAKE, VIRGINIA 23320 • (757) 420-8300
PENINSULA OFFICE • 2101 EXECUTIVE DRIVE • SUITE C • HAMPTON, VIRGINIA 23666 • (757) 262-0094

RESPONSE:

The Department of Environmental Quality (DEQ) has changed the assessment data window from a five-year assessment to a six-year assessment in order to align with the six-year rotating watershed ambient monitoring program. The change allows for approximately one third of all watersheds in the state to be monitored for two years before rotating to the next set of watersheds, culminating in a complete assessment of all significant watersheds in the state every six years. Additionally, as part of this six-year monitoring strategy, it was decided that a trend analysis would be performed every six years to provide periodic updates for trend comparisons that correspond with both our six-year schedule for major review of Virginia's Water Monitoring Strategy as well as a complete statewide watershed assessments. The next trend analysis is scheduled for 2012, followed by another in 2018.

As for the frequency of ambient monitoring data corresponding with the six-year ambient monitoring cycle, DEQ has made using non-agency data a high priority to help supplement our data and improve data frequency. This initiative is helping us fill monitoring data gaps as well as providing information we can use to target areas for our own (DEQ) follow-up monitoring.

JUL 07 2008

Eagle Rock Va.
July 3, 2008

Dear Sir,

I am responding to an artical that was in our local paper. It was a report on the five most polluted streams in Botetourt county. One of those streams is the Little Patterson Creek.

I have lived beside this creek all my life. I will be seventy years old in August. I remember all the different species of fish that came up in the creek when I was growing up. Now there is hardly any kind of life in the creek.

Years ago I have drank the water from the creek, but now I'm afraid to even wade in it.

I hope there some follow up on cleaning this stream up.

Sincerely,

David A Wright 50 Austin Ln.
(540)884-2758 Eagle Rock VA.

RESPONSE:

Department of Environmental Quality (DEQ) appreciates the concern you have for your local waterways and in particular, Little Patterson Creek. It is our duty to follow-up with additional monitoring and cleanup plan on all impaired waters. Those waters initially 303(d) Listed with the 1998 Assessment and some 2002 waters as identified in the 1999 Federal Consent Decree receive higher priority. These Total Maximum Daily Load (TMDL) Studies must be completed by 2010 in order to comply with the Decree. The 2004 Little Patterson Creek bacteria TMDL Study must be completed by 2016. The scheduling of the Little Patterson Creek bacteria TMDL Study will be determined by DEQ based on resources available from both state and federal programs.

EPA COMMENTS/QUESTIONS & DEQ RESPONSES

-----Original Message-----
From: Drago.Helene@epamail.epa.gov [mailto:Drago.Helene@epamail.epa.gov]
Sent: Tuesday, July 01, 2008 11:41 AM
To: Glover,Darryl; Augustine,Harry
Cc: Merrill.Larry@epamail.epa.gov
Subject: Conference call to discuss VA's IR

Good morning. I've had my nose in VA's IR for the past two weeks and I think I'm ready with a list of waters that I have some questions about. I've attached my list, but keep in mind that this only my review. Because the Chesapeake Bay is under such scrutiny and there are numerous delistings based on new CB WQS, I've asked the Chesapeake Bay Program to review the document and provide comments on the delistings.
I would like to schedule a conference call to discuss. I will be away on vacation next week, but am available the week of July 14th. How is Monday, July 14th in the afternoon or Tuesday, July 15th in the morning?
(See attached file: Questions on the 2008 VADEQ IR.doc)
Helene Drago
USEPA- Region III
Water Protection Division 3WP30
1650 Arch Street
Philadelphia, PA 19103
215-814-5796
drago.helene@epa.gov

Questions on the 2008 VADEQ IR					
Watershed Name	**2006 TMDL group ID**	**2008 CAUSE GROUP CODE**	**Use**	**Impairment**	**Comments/Responses**
Potomac					
Bay Segment POTMH	1775		Aquatic Life	DO	On 2006 303(d) list Category 5 but not on 2008 list A30E-01-BAY – Still listed

Questions on the 2008 VADEQ IR					
Watershed Name	**2006 TMDL group ID**	**2008 CAUSE GROUP CODE**	**Use**	**Impairment**	**Comments/Responses**
					for Open Water/ALUS. Delisted for the deepwater use.
Bay Segment POTMH	60126		Aquatic Life	Aquatic Plants	On 2006 303(d) list Category 5 but not on 2008 list Meets Use - Delisted
Bay Segment POTMH	1775		Aquatic Life	DO	On 2006 303(d) list Category 5 but not on 2008 list Isolated areas of the tributaries are classified as deep water. These areas failed their 30-day dissolved oxygen criteria in 2006. However, during the 2008 cycle, they were fully supporting and will be delisted for the Deepwater Use.
Bay Segment POTMH	60126		Shallow Water	Aquatic Plants	On 2006 303(d) list Category 5 but not on 2008 list Meets Use - Delisted
Chesapeake Bay 5 Mesohaline	1766		Aquatic Life	DO	On 2006 303(d) list Category 5 but not on 2008 list (TMDL group codes have now been added to ADB.) CB5MH-DO-BAY - During the 2006 cycle, the 30-day mean dissolved oxygen was acceptable, however there was insufficient data available to assess the other open water criteria, therefore the mainstem could not be delisted. Because the new standards are based on

Questions on the 2008 VADEQ IR					
Watershed Name	**2006 TMDL group ID**	**2008 CAUSE GROUP CODE**	**Use**	**Impairment**	**Comments/Responses**
					segment-wide dissolved oxygen, the coastal tributaries were also considered impaired for dissolved oxygen. The TMDL was due in 2010. In the 2008 cycle, the mesohaline Chesapeake Bay estuary met the Open Water Subuse's 30-day summer and rest-of-year dissolved oxygen criteria. There was insufficient data to assess the other dissolved oxygen criteria. Because the shallow tributaries were not listed for dissolved oxygen prior to the 2006 cycle, the segments will be delisted for dissolved oxygen for both the Open Water Use and Aquatic Life Use. However, since some segments were previously listed, it will remain impaired for dissolved oxygen for the Aquatic Life Use.
Chesapeake Bay 5 Mesohaline	10061		Aquatic Life	Aquatic Plants	On 2006 303(d) list Category 5 but not on 2008 list CB5MH-SAV-BAY – Still listed for SAV
Chesapeake Bay 5 Mesohaline	1766		Open Water	DO	On 2006 303(d) list Category 5 but not on 2008 list CB5MH-DO-BAY - During the 2006 cycle, the 30-day mean dissolved oxygen was

Questions on the 2008 VADEQ IR					
Watershed Name	**2006 TMDL group ID**	**2008 CAUSE GROUP CODE**	**Use**	**Impairment**	**Comments/Responses**
					acceptable, however there was insufficient data available to assess the other open water criteria, therefore the mainstem could not be delisted. Because the new standards are based on segment-wide dissolved oxygen, the coastal tributaries were also considered impaired for dissolved oxygen. The TMDL was due in 2010. In the 2008 cycle, the mesohaline Chesapeake Bay estuary met the Open Water Subuse's 30-day summer and rest-of-year dissolved oxygen criteria. There was insufficient data to assess the other dissolved oxygen criteria. Because the shallow tributaries were not listed for dissolved oxygen prior to the 2006 cycle, the segments will be delisted for dissolved oxygen for both the Open Water Use and Aquatic Life Use. However, since some segments were previously listed, it will remain impaired for dissolved oxygen for the Aquatic Life Use.
Chesapeake Bay 5 Mesohaline	10061		Shallow Water	Aquatic Plants	On 2006 303(d) list Category 5 but not on 2008 list

Questions on the 2008 VADEQ IR					
Watershed Name	**2006 TMDL group ID**	**2008 CAUSE GROUP CODE**	**Use**	**Impairment**	**Comments/Responses**
					See Above
Coan Mill Stream	946		recreation	fecal coliform	first listed in 2002, not 2008 A34R-01-BAC – Listed in 2002 for FC; impairment switched to E. coli in 2008 due to a change in the WQS. The bacterial TMDL due date of 2014 was maintained.
Hunting Creek	306		recreation	E. coli	On 2006 303(d) list Category 5 but not on 2008 list Category 4C - .Report available at http://www.deq.virginia.gov/wqs/rule.html#TR
Lodge Creek	10053		recreation	Enterococcus	Listed as having aTMDL, but I couldn't find A33E-04-BAC - The bacteria TMDL for shellfish impairments in the Yeocomico River watershed was approved by EPA on 6/8/2006. Lodge Creek (Section 028F) was addressed in the report. The Recreation Use impairment was considered Category 4A because the Shellfish WQS is lower than the Recreation Use WQS.
Narrow Passage Creek	1642		recreation	fecal coliform	Listed as having aTMDL, but I couldn't find This creek in included in the North Fork Shenandoah River TMDL for bacteria. Federal TMDL ID # 31235. This is

Questions on the 2008 VADEQ IR					
Watershed Name	**2006 TMDL group ID**	**2008 CAUSE GROUP CODE**	**Use**	**Impairment**	**Comments/Responses**
					noted in ADB under the cause screen comment field for both fecal coliform and e-coli. Both impairments have also been moved over to the 4A screen in the 303d cause information screen.
Potomac Mesohaline	10051		Aquatic Life/Shallow Water	Aquatic Plants	On 2006 303(d) list Category 5 but not on 2008 list A30E-01-BAY – Still listed for SAV
Potomac River, Tidal	Numerous		Fish consumption	PCB	I think a TMDL was done for these waters, but wasn't listed in Categroy 4A A30E-01-PCB - The Potomac River Basin PCB TMDL was approved by EPA on 11/30/2007. The segments should be considered a Category 4A water, however EPA had not created a TMDLID at the time of the 2008 assessment so the AUs could not be transferred to 4A in ADB.
Pugh's Run	1643		recreation	fecal coliform	Listed as having aTMDL, but I couldn't find This creek in included in the North Fork Shenandoah River TMDL for bacteria. Federal TMDL ID # 31235. This is noted in ADB under the cause screen comment field for both fecal coliform and e-coli. Both impairments have also been moved over to the

Questions on the 2008 VADEQ IR					
Watershed Name	**2006 TMDL group ID**	**2008 CAUSE GROUP CODE**	**Use**	**Impairment**	**Comments/Responses**
					4A screen in the 303d cause information screen.
Tumbling Run	1644		recreation	fecal coliform	Listed as having aTMDL, but I couldn't find This creek in included in the North Fork Shenandoah River TMDL for bacteria. Federal TMDL ID # 31235. This is noted in ADB under the cause screen comment field for fecal coliform The impairment has also been moved over to the 4A screen in the 303d information screen. The overall category listing for this assessment unit is 5D as a benthic impairment exists and has not been addressed with a TMDL.
Turley Creek	1632		recreation	fecal coliform	Listed as having aTMDL, but I couldn't find This creek in included in the North Fork Shenandoah River TMDL for bacteria. Federal TMDL ID # 31235. This is noted in ADB under the cause screen comment field for fecal coliform The impairment has also been moved over to the 4A screen in the 303d information screen. The overall category listing for this assessment unit is 5D as a benthic impairment exists and has not

Questions on the 2008 VADEQ IR					
Watershed Name	**2006 TMDL group ID**	**2008 CAUSE GROUP CODE**	**Use**	**Impairment**	**Comments/Responses**
					been addressed with a TMDL.
James River					
Appomattox river, Lower, Ashton Creek	1761		fish consumption	PCB	On 2006 303(d) list Category 5 but not on 2008 list Is on the 2008 list as G01E-03-PCB, Ashton Creek should not be on here and it is not Impaired for PCBs
Ashton Creek	15012		recreation	E. coli	On 2006 303(d) list Category 5 but not on 2008 list It is on the 2008 list the user flag is 2008 J15R-04-BAC
Ballinger Creek	1656		recreation	fecal coliform	2008 list should reflect the 2004 fecal coliform listing E Coli and enterococci are the primary bacteria indicators for recreation use. These waters continue to be listed for recreation use based on the new indicator(s).
Bear Creek Lake	50073		aquatic life	pH	delisted, but did not receive any data to support SCRO Comment: See supplemental delisting info
Bennett Creek	609		fish consumption	PCB	On 2006 303(d) list Category 5 but not on 2008 list EPA question appears in error. Correct in 2008 DEQ DRAFT ADB listed as Category 5A, ID305b = VAT-G13E_BEN01A04 with Cause User Flag = G01E-03-PCB

Questions on the 2008 VADEQ IR					
Watershed Name	**2006 TMDL group ID**	**2008 CAUSE GROUP CODE**	**Use**	**Impairment**	**Comments/Responses**
					with TMDL Group ID = 00609 in Cause Comment (Category 5A; 2006 00609 / 2008 G01E-03-PCB).
Bent Creek	769		recreation	E. coli	2008 list should reflect the 2004 fecal coliform listing E Coli and enterococci are the primary bacteria indicators for recreation use. These waters continue to be listed for recreation use based on the new indicator(s).
Bernards Creek	1183		recreation	E. coli	2008 list should reflect the 2004 fecal coliform listing H39R-10-BAC – Listed in 2004 for FC; impairment switched to E. coli in 2008 due to a change in the WQS. The bacterial TMDL due date of 2016 was maintained.
Big Lickinghole/Little Lickinghole	1176		recreation	E. coli	2008 list should reflect the 2002 fecal coliform listing H37R-01-BAC - Listed in 2002 for FC; impairment switched to E. coli in 2008 due to a change in the WQS. The bacterial TMDL due date of 2014 was maintained.
Buffalo River	50304		recreation	E. coli	2008 list should reflect the 2004 fecal coliform listing E Coli and enterococci are the primary bacteria indicators for recreation use. These waters continue to be

Questions on the 2008 VADEQ IR					
Watershed Name	**2006 TMDL group ID**	**2008 CAUSE GROUP CODE**	**Use**	**Impairment**	**Comments/Responses**
					listed for recreation use based on the new indicator(s).
Byrd Creek	373		recreation	E. coli	2008 list should reflect the 2002 fecal coliform listing H34R-01-BAC - Listed in 2002 for FC; impairment switched to E. coli in 2008 due to a change in the WQS. The bacterial TMDL due date of 2010 was maintained.
Chickahominy River	10097		aquatic life	Aquatic Plants	delisted, but did not receive any data to support VIMS completed the assessment. Delisting was based on their assessment
Chickahominy River	1762		fish consumption	PCB	On 2006 303(d) list Category 5 but not on 2008 list G01E-03-PCB – James River and several tribs, including the Chickahominy River, are listed for PCBs in fish. The impairments were combined.
Chickahominy River	10097		Shallow water	Aquatic Plants	delisted, but did not receive any data to support VIMS Assessment
Cunningham Creek, middle Fork	1671		aquatic life	Benthic	On 2006 303(d) list Category 5 but now on 2008 4C list with no supporting documentation This segment was **incorrectly** changed to 4C in the 2008 cycle. It will remain 5C for 2008 and the change

Questions on the 2008 VADEQ IR					
Watershed Name	**2006 TMDL group ID**	**2008 CAUSE GROUP CODE**	**Use**	**Impairment**	**Comments/Responses**
					has been made in ADB. The overall assessment unit category will remain 5A due to an e-coli impairment. However, the benthic impairment will be changed to 5C in the cause code comment field. Monitoring staff anticipate sampling the site again this year so a second benthic survey will be available to de-list in 2010 if appropriate.
Deep Creek	612		fish consumption	PCB	On 2006 303(d) list Category 5 but not on 2008 list Error in 2008 DEQ DRAFT ADB. Contained in 2008 DRAFT ADB ID305b = VAT-G15E_DEC01A06 with Cause User Flag = G01E-03-PCB but error in Cause Comment mis-type of TMDL Group ID = 611. For 2008 FINAL-ADB TMDL Group ID will be corrected to = 612 in Cause Comment (2006 00612 / 2008 G01E-03-PCB).
Deep Creek, Lower	347 ?3457		recreation	Enterococcus	delisted, but did not receive any data to support EPA report of TMDL Group ID = 347 in error, DEQ 2006 ADB has Cause User Flag (EPA's TMDL Group ID) = 3457. Error in 2008 DEQ DRAFT ADB. After draft ADB transmitted to EPA, error

Questions on the 2008 VADEQ IR					
Watershed Name	**2006 TMDL group ID**	**2008 CAUSE GROUP CODE**	**Use**	**Impairment**	**Comments/Responses**
					found in delisting evaluation and DELIST revoked (so no data sent). Will be corrected & remain impaired in 2008 FINAL-ADB ID305b = VAT-G11E_DEP01A02 , Enterococcus impairment WILL NOT BE DELISTED with Cause User Flag = G11E-03-BAC (and Cause Comment =2006 03457 / 2008 G11E-03-BAC).
Elizabeth River, Eastern Branch	613 ?611		fish consumption	PCB	On 2006 303(d) list Category 5 but not on 2008 list EPA question appears in error. DEQ 2006 ADB has Cause User Flag (TMDL Group ID) = 00611 [not 613 as EPA indicates]. Correct in 2008 DEQ DRAFT ADB listed as Category 5A, ID305b = VAT-G15E_ EBE01A00 with Cause User Flag = G01E-03-PCB and Cause Comment (2006 00611 / 2008 G01E-03-PCB).
Elizabeth River, Western Branch	616		fish consumption	PCB	On 2006 303(d) list Category 5 but not on 2008 list EPA question appears in error. Correct in 2008 DEQ DRAFT ADB, listed as Category 5A, ID305b = VAT-G15E_ WBE01A02 & WBE02A00 with Cause User Flag = G01E-03-PCB with TMDL Group ID = 00616 in

Questions on the 2008 VADEQ IR					
Watershed Name	**2006 TMDL group ID**	**2008 CAUSE GROUP CODE**	**Use**	**Impairment**	**Comments/Responses**
					Cause Comment (Category 5A; 2006 00616 / 2008 G01E-03-PCB).
Fishing Creek	359		recreation	E. coli	first listed as fecal coliform in 1996, not 2008. Also I think a TMDL has been completed and approved E Coli and enterococci are the primary bacteria indicators for recreation use. These waters continue to be listed for recreation use based on the new indicator(s). Lynchburg TMDL was approved 12/4/2007. Virginia only reported TMDLs as complete if they approved prior to 8/1/2007.
Gillies Creek	1131		recreation	E. coli	2008 list should reflect the 2004 fecal coliform listing G01R-06-BAC - Listed in 2004 for FC; impairment switched to E. coli in 2008 due to a change in the WQS. The bacterial TMDL due date of 2016 was maintained.
Gunns Run	1143		aquatic life	DO	On 2006 303(d) list Category 5 but now on 2008 4C list with no supporting documentation G03R-01 - Recommended for reclassification as Class VII swampwaters. Until the WQS can be revised the segment will be considered a Category

Questions on the 2008 VADEQ IR					
Watershed Name	**2006 TMDL group ID**	**2008 CAUSE GROUP CODE**	**Use**	**Impairment**	**Comments/Responses**
					4C water. Report available at http://www.deq.virginia.gov/wqs/rule.html#TR
Gunns Run	338		aquatic life	pH	On 2006 303(d) list Category 5 but now on 2008 4C list with no supporting documentation G03R-01 - Recommended for reclassification as Class VII swampwaters. Until the WQS can be revised the segment will be considered a Category 4C water. Report available at http://www.deq.virginia.gov/wqs/rule.html#TR
James River	Numerous		aquatic life	numerous	I am having a hard time matching 2008 list with 2006 list Previous mainstem James River ALUS impairments were renamed: G01E-04-SAV, G02E-01-BAY, G04E-01-CHLR, G04E-02-EBEN, and G04E-03. Also new impairments for chlorophyll a: G01E-01-CHLA, G02E-02-CHLA, and G04E-04-CHLA
Jones Creek (Pagan River	606		fish consumption	PCB	On 2006 303(d) list Category 5 but not on 2008 list EPA question appears in error. Correct in 2008 DEQ DRAFT ADB, listed as Category 5A, ID305b = VAT-G11E_JOG01A08 & JOG02A08 with Cause User

Questions on the 2008 VADEQ IR					
Watershed Name	**2006 TMDL group ID**	**2008 CAUSE GROUP CODE**	**Use**	**Impairment**	**Comments/Responses**
					Flag = G01E-03-PCB with TMDL Group ID = 00606 in Cause Comment (Category 5A; 2006 00606 / 2008 G01E-03-PCB).
King Creek/Ballards Marsh	1285		shellfish	fecal coliform	On 2006 303(d) list Category 5 but not on 2008 list EPA question appears in error. Correct in 2008 DEQ DRAFT ADB, present as two AUs. Listed as Category 5A, ID305b = VAT-G11E_BAL01A06 and VAT-G11E_KIN01A06, with Cause User Flag = G11E-17-SF with TMDL Group ID = 01285 in Cause Comment (Category 5A, 2006 01285 / 2008 G11E-17-SF).
Lafayette River	1524		aquatic life	Estuarine Bioassessments	delisted, but did not receive any data to support As noted in earlier reply re: Estuarine Bioassessments (BIBI) by H. Augustine e-mail 7/2/08 “documentation relative to delistings for Bay segments are associated with the reports provided by the Bay program, VIMS (for SAV/Water Clarity) & VERSAR (for BIBI). The Bay program evaluation for Estuarine Bioassessments (BIBI) for the 2008 IR report indicates that the Use Support Goal and the aquatic

Questions on the 2008 VADEQ IR					
Watershed Name	**2006 TMDL group ID**	**2008 CAUSE GROUP CODE**	**Use**	**Impairment**	**Comments/Responses**
					life Use was met based on the results of benthic BIBI probabilistic station surveys.
Lafayette River	614		fish consumption	PCB	On 2006 303(d) list Category 5 but not on 2008 list EPA question appears in error. Correct in 2008 DEQ DRAFT ADB, listed as Category 5A, ID305b = VAT-G15E_LAF01A06 & LAF02A06 with Cause User Flag = G01E-03-PCB with TMDL Group ID = 00614 in Cause Comment (Category 5A; 2006 00614 / 2008 G01E-03-PCB).
Lafayette River (lower)	1531		aquatic life	TBT	On 2006 303(d) list Category 5 but not on 2008 list EPA question appears in error. Correct in 2008 DEQ DRAFT ADB, listed as Category 5A, ID305b = VAT-G15E_LAF02A06 with Cause User Flag = G15E-03-01-TBT with TMDL Group ID = 01531 in Cause Comment (Category 5A; 2006 01531 / 2008 G15E-03-01-TBT).
Marrowbone Creek	741		aquatic life	DO	first listed 2006, not 2008 SCRO Comment: Lake segment combined with Sandy River Reservoir segment. Sandy River Reservoir is listed under Cause Group Code – J03L-01-DO

Questions on the 2008 VADEQ IR					
Watershed Name	**2006 TMDL group ID**	**2008 CAUSE GROUP CODE**	**Use**	**Impairment**	**Comments/Responses**
Mill Creek, Lower	1692		recreation	fecal coliform	2008 list should reflect the 2004 fecal coliform listing
Montebello Spring Branch	1650		aquatic life	pH	Listed as having aTMDL, but I couldn't find This impairment was **incorrectly** listed as 4A in the Cause Code comment field in ADB. It has been corrected to reflect the correct 5A status. The assessment unit overall category is 5D due to the existence of an approved TMDL for benthics on the same segment.
Morris Creek	342		aquatic life	DO	On 2006 303(d) list Category 5 but now on 2008 4C list with no supporting documentation Previous mainstem James River ALUS impairments were renamed: G01E-04-SAV, G02E-01-BAY, G04E-01-CHLR, G04E-02-EBEN, and G04E-03. Also new impairments for chlorophyll a: G01E-01-CHLA, G02E-02-CHLA, and G04E-04-CHLA
Morris Creek	342		aquatic life	pH	On 2006 303(d) list Category 5 but now on 2008 4C list with no supporting documentation G08R-01 - Recommended for reclassification as Class VII swampwaters. Until the WQS can be revised the segment will be considered a Category

Questions on the 2008 VADEQ IR					
Watershed Name	**2006 TMDL group ID**	**2008 CAUSE GROUP CODE**	**Use**	**Impairment**	**Comments/Responses**
					4C water. Report available at http://www.deq.virginia.gov/wqs/rule.html#TR
Morris Creek	341		recreation	fecal coliform	2008 list should reflect the 2002 fecal coliform listing G08R-01-BAC - Listed in 2002 for FC; impairment switched to E. coli in 2008 due to a change in the WQS. The bacterial TMDL due date of 2010 was maintained.
No Name Creek	1130		recreation	fecal coliform	2008 list should reflect the 2004 fecal coliform listing G01R-08-BAC - Listed in 2004 for FC; impairment switched to E. coli in 2008 due to a change in the WQS. The bacterial TMDL due date of 2016 was maintained.
North Creek	731		aquatic life	Benthic	first listed in 2002, not 2008 SCRO Comment: Impaired segment has changed in 2008 to reflect corrections made to station location and creek delineation. Old impairment - 1.24 miles (downstream of 2008 impairment)
Pitch Kettle Creek - Lake	76570		aquatic life	DO	On 2006 303(d) list Category 5 but not on 2008 list EPA question appears in error. DEQ 2006 ADB has Cause User Flag (TMDL Group ID) = 76569 [not 76570 as EPA indicates]. Correct in

Questions on the 2008 VADEQ IR					
Watershed Name	**2006 TMDL group ID**	**2008 CAUSE GROUP CODE**	**Use**	**Impairment**	**Comments/Responses**
					2008 DEQ DRAFT ADB, merged into larger lake segment for 2008 (due to whole lake 2008 method) listed as Category 5A, ID305b = VAT-G12L_LMD01A06 with Cause User Flag = G12L-02-DO with TMDL Group ID = 76569 in Cause Comment (Category 5A; 76569 / 2008 G12L-02-DO).
Pocoshock Creek	10003		aquatic life	E. coli	2008 list should reflect the 2006 fecal coliform listing G10R-10-BAC - Listed in 2006 for FC; impairment switched to E. coli in 2008 due to a change in the WQS. The bacterial TMDL due date of 2018 was maintained.
Powhite Creek	1190		recreation	fecal coliform	2008 list should reflect the 2002 fecal coliform listing H39R-05-BAC - Listed in 2002 for FC; impairment switched to E. coli in 2008 due to a change in the WQS. The bacterial TMDL due date of 2014 was maintained.
Rock Island Creek	1657		recreation	fecal coliform	2008 list should reflect the 2004 fecal coliform listing E Coli and enterococci are the primary bacteria indicators for recreation use. These waters continue to be listed for recreation use based on the new

Questions on the 2008 VADEQ IR					
Watershed Name	**2006 TMDL group ID**	**2008 CAUSE GROUP CODE**	**Use**	**Impairment**	**Comments/Responses**
					indicator(s).
Rocky Ford Creek	15009		recreation	E. coli	2008 list should reflect the 2004 fecal coliform listing E Coli and enterococci are the primary bacteria indicators for recreation use. These waters continue to be listed for recreation use based on the new indicator(s).
St Julian Creek	614		fish consumption	PCB	On 2006 303(d) list Category 5 but not on 2008 list EPA report of TMDL Group ID = 614 in error, DEQ 2006 ADB has Cause User Flag (EPA's TMDL Group ID) = 615. Correct in 2008 DEQ DRAFT ADB, listed as Category 5A, ID305b = VAT-G15E_STJ01A04 with Cause User Flag = G01E-03-PCB, in Cause Comment as (Category 5A; 2006 00615 / 2008 G01E-03-PCB).
Skiffes Creek	609		fish consumption	PCB	On 2006 303(d) list Category 5 but not on 2008 list Group ID) = 608. Correct in use User Flag = G01E-03-
Star Creek	610		fish consumption	PCB	On 2006 303(d) list Category 5 but not on 2008 list EPA question appears in error. Correct in DEQ 2008 DRAFT ADB, listed as Category 5A, ID305b = VAT-

Questions on the 2008 VADEQ IR					
Watershed Name	**2006 TMDL group ID**	**2008 CAUSE GROUP CODE**	**Use**	**Impairment**	**Comments/Responses**
					G13E_STR01A04 with Cause User Flag = G01E-03-PCB with TMDL Group ID = 00610 in Cause Comment (Category 5A; 2006 00610 / 2008 G01E-03-PCB).
Wreck Island Creek	768		recreation	fecal coliform	2008 list should reflect the 2004 fecal coliform listing E Coli and enterococci are the primary bacteria indicators for recreation use. These waters continue to be listed for recreation use based on the new indicator(s).
Rappahannock River					
Little Wicomico River	10026		Aquatic life	pH	On 2006 303(d) list Category 5 but not on 2008 list A34R-02-PH – I am unsure of her question. The segment IS impaired as Category 5C. See VAP-A34E_LIS01A06
Mulberry Creek	90705		Aquatic life	Chloride	On 2006 303(d) list Category 5 but not on 2008 list E25E-03-CHLR – I am unsure of her question and think she may be confusing different Mulberry Creeks. My Mulberry Creek was called 10075 last cycle. It was and remains impaired for chloride as Category 5C. See VAP-E25E_MUB01A02, VAP-E25E_MUB01B08,

Questions on the 2008 VADEQ IR					
Watershed Name	**2006 TMDL group ID**	**2008 CAUSE GROUP CODE**	**Use**	**Impairment**	**Comments/Responses**
					VAP-E25E_MUB02A06, & VAP-E25E_MUB03A08
Rappahannock River	10069		Aquatic life	Aquatic Plants	delisted, but did not receive any data to support VIMS Assessment
Rappahannock River	10069		SAV	Aquatic Plants	delisted, but did not receive any data to support VIMS Assessment
Roanoke and Yadkin Rivers					
Back Creek	704	**L06R-01-BAC**	recreation	fecal coliform	2008 list should reflect the 2004 fecal coliform listing. Escherichia coli (E.coli) replaces fecal coliform bacteria as the indicator as per Water Quality Standards [9 VAC 25-260-170. Bacteria; other waters]. Remains Category 5A 2008 and retains 2004 FC TMDL Schedule Date (2016).
Banister River	549		fish consumption	PCB	On 2006 303(d) list Category 5 but not on 2008 list SCRO Comment: Segment was combined with other segments in VDH Fishing Advisory listed under Cause Group Code L60R-01-PCB
Buffalo Creek, Upper and Lower	50286		recreation	fecal coliform/E. coli	2008 list should reflect the 2006 fecal coliform listing E Coli and enterococci are the primary bacteria indicators for recreation use. These waters continue to be listed for recreation use

Questions on the 2008 VADEQ IR					
Watershed Name	**2006 TMDL group ID**	**2008 CAUSE GROUP CODE**	**Use**	**Impairment**	**Comments/Responses**
					based on the new indicator(s).
Coleman Creek	774		recreation	fecal coliform	2008 list should reflect the 2006 fecal coliform listing E Coli and enterococci are the primary bacteria indicators for recreation use. These waters continue to be listed for recreation use based on the new indicator(s).
Hyco ~~Creek~~ River	50032		fish consumption	PCB	On 2006 303(d) list Category 5 but not on 2008 list SCRO Comment: Segment was combined with other segments in VDH Fishing Advisory listed under Cause Group Code L60R-01-PCB. Also, segment name is Hyco River, not Hyco Creek.
Lake Gordon	50024		Aquatic Life	DO	delisted, but did not receive any data to support SCRO Comment: See supplemental delisting info
Leatherwood Creek	50294	**L56R-01-BAC**	recreation	fecal coliform	2008 list should reflect the 2002 fecal coliform listing. Station 4ALWD002.34 is a 1999 Federal Consent Decree Attachment B station. Escherichia coli (E.coli) replaces fecal coliform bacteria as the indicator as per Water Quality Standards [9 VAC 25-260-170. Bacteria; other waters]. Remains

Questions on the 2008 VADEQ IR					
Watershed Name	**2006 TMDL group ID**	**2008 CAUSE GROUP CODE**	**Use**	**Impairment**	**Comments/Responses**
					Category 5A 2008 and retains 2002 (1998) Attachment B FC TMDL Schedule Date (2010).
Leesville Lake	50500		Aquatic Life	~~DO~~ pH	delisted, but did not receive any data to support SCRO Comment: See supplemental delisting info
Little Coleman Creek	776		recreation	fecal coliform	2008 list should reflect the 2002 fecal coliform listing E Coli and enterococci are the primary bacteria indicators for recreation use. These waters continue to be listed for recreation use based on the new indicator(s).
Marrowbone Creek	376		recreation	fecal coliform	2008 list should reflect the 2002 fecal coliform listing. Escherichia coli (E.coli) replaces fecal coliform bacteria as the indicator as per Water Quality Standards [9 VAC 25-260-170. Bacteria; other waters]. Remains Category 5A 2008 and retains 2002 TMDL Schedule Date (2014).
Smith River	several id codes	L52R-01-BAC	recreation	fecal coliform	2008 list should reflect the 2002, 2004 and 2006 fecal coliform listing. Escherichia coli (E.coli) replaces fecal coliform bacteria as the indicator as per Water Quality Standards [9 VAC 25-260-170. Bacteria;

Questions on the 2008 VADEQ IR					
Watershed Name	**2006 TMDL group ID**	**2008 CAUSE GROUP CODE**	**Use**	**Impairment**	**Comments/Responses**
					other waters]. Remains Category 5A 2008 and retains 2002 TMDL Schedule Date (2014).
Stinking River	771		recreation	fecal coliform	2008 list should reflect the 2004 fecal coliform listing E Coli and enterococci are the primary bacteria indicators for recreation use. These waters continue to be listed for recreation use based on the new indicator(s).
Wards Fork Creek	753		recreation	fecal	2008 list should reflect the 2002 fecal coliform listing E Coli and enterococci are the primary bacteria indicators for recreation use. These waters continue to be listed for recreation use based on the new indicator(s).
Chowan River and Dismal Swamp					
Albermarle Canal (upstream of North Landing)	1575		wildlife and aquatic life	chloride	On 2006 303(d) list Category 5 but not on 2008 list Error in 2008 DEQ DRAFT ADB ID305b = VAT-K41R_AAC01A06. Chloride impairment omitted in error from wildlife and aquatic life Uses. Will correct in 2008 FINAL-ADB. Cause Comment will contain (Category 5A,

Questions on the 2008 VADEQ IR					
Watershed Name	**2006 TMDL group ID**	**2008 CAUSE GROUP CODE**	**Use**	**Impairment**	**Comments/Responses**
					2006 01575 / 2008 K41R-03-CHLR).
Black Swamp	1360		recreation	fecal coliform	On 2006 303(d) list Category 5 but not on 2008 list K29R-01-BAC – Included in Assamoosick Swamp Watershed impairment. TMDL is due in 2014.
Fontaine Creek	680		aquatic life	DO	On 2006 303(d) list Category 5 but now on 2008 4C list with no supporting documentation K11R-02-DO – Fontaine Creek is classified as Class VII in the WQS. The segment continues to show dissolved oxygen violations and will be considered Category 4C for dissolved oxygen until the new swampwater DO criteria can be developed.
Fontaine Creek	1317		recreation	fecal coliform	delisted, but did not receive any data to support Data was included in delisting Excel workbook – sheet "VAP-K10R-02 & 01317"
Great Creek	1746		recreation	fecal coliform	On 2006 303(d) list Category 5 but not on 2008 list K06R-02-BAC - During the 2008 cycle, the segment remained impaired and the impairment converted from fecal coliform to E. coli. The TMDL is still due in 2014.
Hunting Quarter	1354		aquatic life	pH	On 2006 303(d) list Category

Questions on the 2008 VADEQ IR					
Watershed Name	**2006 TMDL group ID**	**2008 CAUSE GROUP CODE**	**Use**	**Impairment**	**Comments/Responses**
Swamp					5 but now on 2008 4C list with no supporting documentation K24R-01-PH - Recommended for reclassification as Class VII swampwaters. Until the WQS can be revised the segment will be considered a Category 4C water. Report available at http://www.deq.virginia.gov/wqs/rule.html#TR
Meherrin River	1309, 1314		recreation	fecal coliform	2008 list should reflect the 2002 fecal coliform listing K05R-02-BAC - During the 2008 cycle, the segment remained impaired and the impairment converted from fecal coliform to E. coli. The TMDL is still due in 2014
Nebletts Mill Run, UT - XDV	1352		recreation	fecal coliform	2008 list should reflect the 2004 fecal coliform listing K23R-03-BAC - During the 2008 cycle, the tributary remained impaired and the impairment converted from fecal coliform to E. coli. The TMDL is still due in 2016. (FYI-The Nebletts Mill Run mainstem was delisted in the 2006 cycle.)
North Meherrin River	463		recreation	fecal coliform	2008 list should reflect the 2002 fecal coliform listing

Questions on the 2008 VADEQ IR					
Watershed Name	**2006 TMDL group ID**	**2008 CAUSE GROUP CODE**	**Use**	**Impairment**	**Comments/Responses**
					E Coli and enterococci are the primary bacteria indicators for recreation use. These waters continue to be listed for recreation use based on the new indicator(s).
Otterdam Swamp	1378		recreation	fecal coliform	2008 list should reflect the 2002 fecal coliform listing K32R-04-BAC - During the 2008 cycle, the segment remained impaired and the impairment converted from fecal coliform to E. coli. The TMDL is still due in 2014
Rattlesnake Creek	1318		recreation	fecal coliform	delisted, but did not receive any data to support Data was included in delisting Excel workbook – sheet "VAP-K10R-01, 01318 & 00661"
Rattlesnake ~~Swamp~~ Creek	661		aquatic life	pH	delisted, but did not receive any data to support Data was included in delisting Excel workbook – sheet "VAP-K10R-01, 01318 & 00661"
Rowanty Creek, Gosee Swamp and Trib	478		aquatic life	DO	On 2006 303(d) list Category 5 but now on 2008 4C list with no supporting documentation K23R-01-DO - The entire Rowanty Creek watershed has previously been assessed not supporting of

Questions on the 2008 VADEQ IR					
Watershed Name	2006 TMDL group ID	2008 CAUSE GROUP CODE	Use	Impairment	Comments/Responses
					the Aquatic Life use support goal based on DO and pH violations. During the 2006 cycle, the lower portion of the Rowanty Creek watershed below Gravelly Run was reclassified as Class VII swampwaters. That segment was now in conformance with the pH and DO standards and was delisted. During the 2008 cycle, additional monitoring was conducted in the watershed as part of a Natural Conditions Assessment. Gravelly Run and its tributaries from its mouth upstream to river mile 8.56 and Hatcher Run and its tributaries from its confluence with Rowanty Creek to river mile 19.27, excluding Picture Branch, were recommended for reclassification as Class VII swampwater. The segments will be considered Category 4C for pH until the WQS can be revised. .Report available at http://www.deq.virginia.gov/wqs/rule.html#TR

Questions on the 2008 VADEQ IR					
Watershed Name	**2006 TMDL group ID**	**2008 CAUSE GROUP CODE**	**Use**	**Impairment**	**Comments/Responses**
					The majority of segments remain impaired of the dissolved oxygen standard, but will be classified as Category 4C until the swampwater DO standard can be developed. Picture Branch is a Class III waters, but was delisted because station 5APCT001.23 has an acceptable DO violation rate. The Gosee Swamp watershed was assessed as not supporting of the Aquatic Life use because of DO and pH violations at 5AGSE001.35 during the 1998 cycle. During the 2008 cycle, Gosee Swamp and its tributaries from its confluence with the Nottoway River to rivermile 6.88 was reclassified as Class VII swampwater. Monitoring at stations 5AGSE001.35 and 5AGSE003.12 showed that the pH was within the Class VII WQS and the segment will be delisted for pH. The segment will remain impaired for dissolved oxygen until the Class VII DO criteria can be developed.
Rowanty Creek,	477		aquatic life	pH	On 2006 303(d) list Category

Questions on the 2008 VADEQ IR					
Watershed Name	**2006 TMDL group ID**	**2008 CAUSE GROUP CODE**	**Use**	**Impairment**	**Comments/Responses**
Gosee Swamp and Trib					5 but now on 2008 4C list with no supporting documentation K23R-01-PH – See above
Seacock Swamp, Upper	76050		recreation	fecal coliform	On 2006 303(d) list Category 5 but not on 2008 list Error in 2008 DEQ DRAFT ADB ID305b = VAT-K35R_SCK01A00. Fecal Coliform impairment omitted in error from Recreation Use (*appears 2006 IR FC impairment not carried forward when no Ecoli data available)*. Will correct in 2008 FINAL-ADB with the Cause Comment to contain (Category 5A, 2006 76050 / 2008 K35R-02-BAC).
Seacock Swamp,	1560		aquatic life	pH	delisted, but did not receive any data to support Data submitted
West Neck Creek, Lower	1579		wildlife	chloride	On 2006 303(d) list Category 5 but not on 2008 list, although the list does include chloride for aquatic life use. Error in 2008 DEQ DRAFT ADB ID305b = VAT-K41R_WNC02A04. Chloride impairment omitted in error from wildlife Use (*appears 2006 IR wildlife use chloride impairment not carried forward)*. Will correct in 2008 FINAL-ADB. Cause Comment will contain (Category 5A,

Questions on the 2008 VADEQ IR					
Watershed Name	**2006 TMDL group ID**	**2008 CAUSE GROUP CODE**	**Use**	**Impairment**	**Comments/Responses**
					2006 01579 / 2008 K41R-06-CHLR).
West Neck Creek, Middle	1578		wildlifer	chloride	On 2006 303(d) list Category 5 but not on 2008 list, although the list does include chloride for aquatic life use. Error in 2008 DRAFT ADB ID305b = VAT-K41R_WNC01A00. Chloride impairment omitted in error from wildlife Use (*appears 2006 IR wildlife use chloride impairment not carried forward)*. Will correct in 2008 DEQ FINAL-ADB. Cause Comment will contain (Category 5A, 2006 01578 / 2008 K41R-05-CHLR).
Tennessee and Big Sandy River					
Big Cherry Reservoir	1410	P18L-01-DO	aquatic life	DO	On 2006 303(d) list Category 5 but now on 2008 4C list with no supporting documentation Should be 5C
Big Cherry Reservoir	90001	P18L-01-PH	aquatic life	pH-**vio**	On 2006 303(d) list Category 5 but now on 2008 4C list with no supporting documentation Should be **5C**
Big Prater Creek	50224	Q04R-01-BAC	recreation	E. Coli	On 2006 303(d) list Category 5 but not on 2008 list It is listed.

Questions on the 2008 VADEQ IR					
Watershed Name	**2006 TMDL group ID**	**2008 CAUSE GROUP CODE**	**Use**	**Impairment**	**Comments/Responses**
Hidden Valley Lake	1385		aquatic life	DO	delisted, but did not receive any data to support DATA ATTACHED
Hidden Valley Lake	50077		aquatic life	pH	On 2006 303(d) list Category 5 but not on 2008 list DATA ATTACHED
Hungry Mother Lake	901		aquatic life	pH	delisted, but did not receive any data to support DATA ATTACHED
John Flannagan Reservoir	1428		aquatic life	DO, pH	delisted, but did not receive any data to support DATA ATTACHED
Lake Keokee	1419, 1418	P20L-01-DO P20L-01-PH	aquatic life	DO, pH-vio	On 2006 303(d) list Category 5 but now on 2008 4C list with no supporting documentation DATA ATTACHED; Should be **5C** for pH
Laurel Bed Lake	50027	O11L-02-DO	aquatic life	DO	delisted, but did not receive any data to support DATA ATTACHED
Laurel Bed Lake	50078	O11L-02-PH	aquatic life	pH-**vio**	On 2006 303(d) list Category 5 but now on 2008 4C list with no supporting documentation Should be **5C**
Poor Valley Creek	40107	P19R-02-BEN	aquatic life	benthic	On 2006 303(d) list Category 5 but now on 2008 4C list with no supporting documentation sample collected during **drought**-not representative 5C
Pound Reservoir, North Fork	1427	Q13L-02-DO	aquatic life	DO	On 2006 303(d) list Category 5 but now on 2008 4C list

Questions on the 2008 VADEQ IR					
Watershed Name	**2006 TMDL group ID**	**2008 CAUSE GROUP CODE**	**Use**	**Impairment**	**Comments/Responses**
					with no supporting documentation SUPPLEMENTAL DATA ATTACHED
Slate Creek	514	Q04R-01-BEN	aquatic life	benthic	On 2006 303(d) list Category 5 but not on 2008 list – It is listed. – CH 3.3b - 29
Wise Reservoir	1400		aquatic life	DO	delisted, but did not receive any data to support SUPPLEMENTAL DATA ATTACHED
Cheasapeake Bay/Atlantic/Small Coastal					
Burke Mill Stream	1017		recreation	fecal coliform	2008 list should reflect the 2004 fecal coliform listing C04R-02-BAC - The impairment converted to E. coli. The original TMDL due date of 2016 is maintained.
Bush Mill stream	977		recreation	fecal coliform	delisted, but did not receive any data to support Data was included in delisting Excel workbook – sheet "VAP-C01R-01 & 00977"
Cheasapeake Bay MOBPH	80017		aquatic life	estuarine bioass	On 2006 303(d) list Category 5 but not on 2008 list (This assessment unit shouldn't be listed for estuarine bioassessment).
Cheaspeake Bay - Off Little Creek BSS# 60 Area A and Area B	80006 and 80005		aquatic life/SAV	aquatic plants	On 2006 303(d) list Category 5 but not on 2008 list (TMDL group codes have now been added to ADB.)
Harper Creek, Foxes	1738		aquatic life	DO	On 2006 303(d) list Category

Questions on the 2008 VADEQ IR					
Watershed Name	**2006 TMDL group ID**	**2008 CAUSE GROUP CODE**	**Use**	**Impairment**	**Comments/Responses**
Creek, Gallaman Swamp					5 but not on 2008 list It was determined that the station was mistakenly identified as riverine previously and is actually tidally influenced. Data was included in delisting Excel workbook – sheet "VAP-C03R-01 & 01738"
Lake Whitehurst	76601		fish consumption	Mercury	2008 list should reflect the 2006 mercury listing EPA question appears in error. Correct in 2008 DEQ DRAFT ADB, listed as Category 5A, ID305b = VAT-C08L_LAW01A08 with Cause User Flag = C08L-01-HG 00610 in Cause Comment (Category 5A, 2008 C08L-01-HG). Omission in draft of TMDL Group ID (76601). Will correct in 2008 FINAL-ADB Cause Comment to add 2006 TMDL Group ID as (Category 5A, 2006 76601 / 2008 C08L-01-HG).
Lake Whitehurst - Azalea Garden	76005		aquatic life	DO	2008 list should reflect the 2006 listing EPA question appears in error. Correct in 2008 DEQ DRAFT ADB, merged into larger lake segment for 2008 (due to whole lake 2008 method) listed as Category 5A, ID305b = VAT-C08L_LAW01A08 with Cause

Questions on the 2008 VADEQ IR					
Watershed Name	**2006 TMDL group ID**	**2008 CAUSE GROUP CODE**	**Use**	**Impairment**	**Comments/Responses**
					User Flag = C08L-01-DO and Cause Comment as (Category 5A, 2008 C08L-01-DO).). Will correct in 2008 FINAL-ADB Cause Comment to add 2006 TMDL Group ID as (Category 5A, 2006 76005 / 2008 C08L-01-DO).
Lake Whitehurst - Azalea Garden	76005 ?76006		aquatic life	pH	On 2006 303(d) list Category 5 but not on 2008 list DEQ 2006 ADB has Cause User Flag (TMDL Group ID) = 76006 [not 76005 as EPA indicates]. Error in 2008 DRAFT ADB ID305b = VAT-C08L_LAW01A08. The 2008 draft should have indicated delisting of the pH impairment from aquatic life Use (*2006 IR aquatic life use pH impairment* located in ADB AU ID305b = VAT-C08L_LAW02A06). Will correct in 2008 FINAL-ADB to indicate in Use Comment that delisting of the aquatic life use pH impairment is proposed based on new Lake Guidance criteria due to pooled pH data.
Little Creek Reservoir	1445		aquatic life	pH	delisted, but did not receive any data to support Error in 2008 DRAFT ADB ID305b = VAT-C08L_LTR01A08. The 2008 draft should have indicated

Questions on the 2008 VADEQ IR					
Watershed Name	**2006 TMDL group ID**	**2008 CAUSE GROUP CODE**	**Use**	**Impairment**	**Comments/Responses**
					delisting of the pH impairment from aquatic life Use (*2006 IR aquatic life use pH impairment* located in ADB AU ID305b VAT-C08L_ LTR02A02). Will correct in 2008 FINAL ADB to indicate in Use Comment that delisting of the aquatic life use pH impairment is proposed based on new Lake Guidance criteria due to pooled pH data.
Mobjack Bay	15000		fish consumption	PCB	On 2006 303(d) list Category 5 but not on 2008 list C01E-17-PCB – Remains impaired for PCBs in fish tissue due to fish consumption advisory dated 12/13/2004 for PCBs in the Mobjack Bay and its tributaries, particularly the East, West, and Ware Rivers.
Muddy Creek	1449		recreation	fecal coliform	2008 list should reflect the 1998 fecal coliform listing EPA question appears in error. Correct in 2008 DEQ DRAFT ADB. Previous fecal coliform impairment replaced with Enterococcus and listed as Category 5A, ID305b = VAT-C10E_MUD01A04, with Cause User Flag = C10E-02-BAC with TMDL Group ID = 01449 in Cause Comment (Category 5A, 2006 01449 /

Questions on the 2008 VADEQ IR					
Watershed Name	**2006 TMDL group ID**	**2008 CAUSE GROUP CODE**	**Use**	**Impairment**	**Comments/Responses**
					2008 C10E-02-BAC).
Newmarket Creek	415		Shellfish & recreation	Fecal coliform and enterococci	EPA question did not define discrepancy. This water is contained in DEQ 2008 DRAFT ADB as ID305b = VAT-C07E_NEW01A02 & NEW01A02, Use = Recreation with impairment = Enterococcus. Cause Comment as (2006 00613 / 2008 G01E-03-PCB). However 2006 Category 5A changed in 2008 to Category 4A due to shellfish TMDL covering this area (TMDL ID = 31234, TMDL NAME = NEW MARKET CREEK, ESTABLISHMENT DATE = 08/02/2006)
York River					
Harrison Creek	1116		aquatic life	pH	delisted, but did not receive any data to support Data was included in delisting Excel workbook – sheet "VAP-F14R-02 & 01116"
Herring Creek	60118		aquatic life	pH	On 2006 303(d) list Category 5 but now on 2008 4C list with no supporting documentation .Report available at http://www.deq.virginia.gov/wqs/rule.html#TR
Indian Field Creek	1272		Shellfishing	fecal coliform	On 2006 303(d) list Category

Questions on the 2008 VADEQ IR					
Watershed Name	**2006 TMDL group ID**	**2008 CAUSE GROUP CODE**	**Use**	**Impairment**	**Comments/Responses**
			Use is not applicable		5 but not on 2008 list Due to the VDH_DSS evaluation for this shellfish area the assessment rating is no longer impaired (Category 5). 2008 DEQ DRAFT ADB Assessment Units Comment for this water (ID305b = VAT-F27E_IFC01A00) explains that VDH-DSS condemnation category use change from condemned to administratively condemned (ADMIN condemned) by VDH-DSS effective 6/14/2006. Therefore (per DEQ assessment procedures) the Shellfish Use is not considered for this AU. Not possible to note delisting in the Use Comment as the shellfishing use is not present in the ADB database for this AU.
Mattaponi River	1124		aquatic life	estuarine bio	delisted, but did not receive any data to support Data is included in the B-IBI consultant (VERSAR) report
Monquin Creek	247		recreation	E. coli	On 2006 303(d) list Category 5 but not on 2008 list F13R-04-BAC - the bacteria TMDL was addressed as part of the Pamunkey River Basin Bacteria TMDL, which was approved by EPA on 8/2/2006. This should be

Questions on the 2008 VADEQ IR					
Watershed Name	**2006 TMDL group ID**	**2008 CAUSE GROUP CODE**	**Use**	**Impairment**	**Comments/Responses**
					considered a Category 4A water.
Pamunkey River	1114, 10085		aquatic life	estuarine bio	delisted, but did not receive any data to support VERSAR Report
Reedy Creek	327		aquatic life	pH	On 2006 303(d) list Category 5 but now on 2008 4C list with no supporting documentation Possible stream mix-up? I have a Reedy Creek but it is 10044 (now K20R-01-PH). Was listed for pH, but is now recommended for Class VII and is considered 4C. Report available at http://www.deq.virginia.gov/wqs/rule.html#TR
New River					
Byllesby Reservoir	50155	N08R-01-BAC	recreation	E.coli	On 2006 303(d) list Category 5 but not on 2008 list Changed to run of river-filled with sediment, not impounded**, is on 2008 list**
New River, upper Allisonia	504	**De-Listed 2008**	aquatic life	benthic	On 2006 303(d) list Category 5 but not on 2008 list. The Aquatic Life Benthic impairment is de-listed with US EPA approval on December 19, 2007. Supporting documentation submitted September 2007.
New River, upper	1721		recreation	E.coli	On 2006 303(d) list Category

Questions on the 2008 VADEQ IR					
Watershed Name	**2006 TMDL group ID**	**2008 CAUSE GROUP CODE**	**Use**	**Impairment**	**Comments/Responses**
Allisonia		**N08R-01-BAC**			5 but not on 2008 list. Escherichia coli (E.coli) replaces fecal coliform bacteria as the indicator as per Water Quality Standards [9 VAC 25-260-170. Bacteria; other waters]. Remains Category 5A 2008 and retains 2004 TMDL Schedule Date (2016).
Rich Creek					
Rural Retreat Lake	50076	N10L-01-PH	aquatic life	pH-**vio**	On 2006 303(d) list Category 5 but now on 2008 4C list with no supporting documentation Should be **5C**